

# PUBLIC ROADS

A JOURNAL OF HIGHWAY RESEARCH

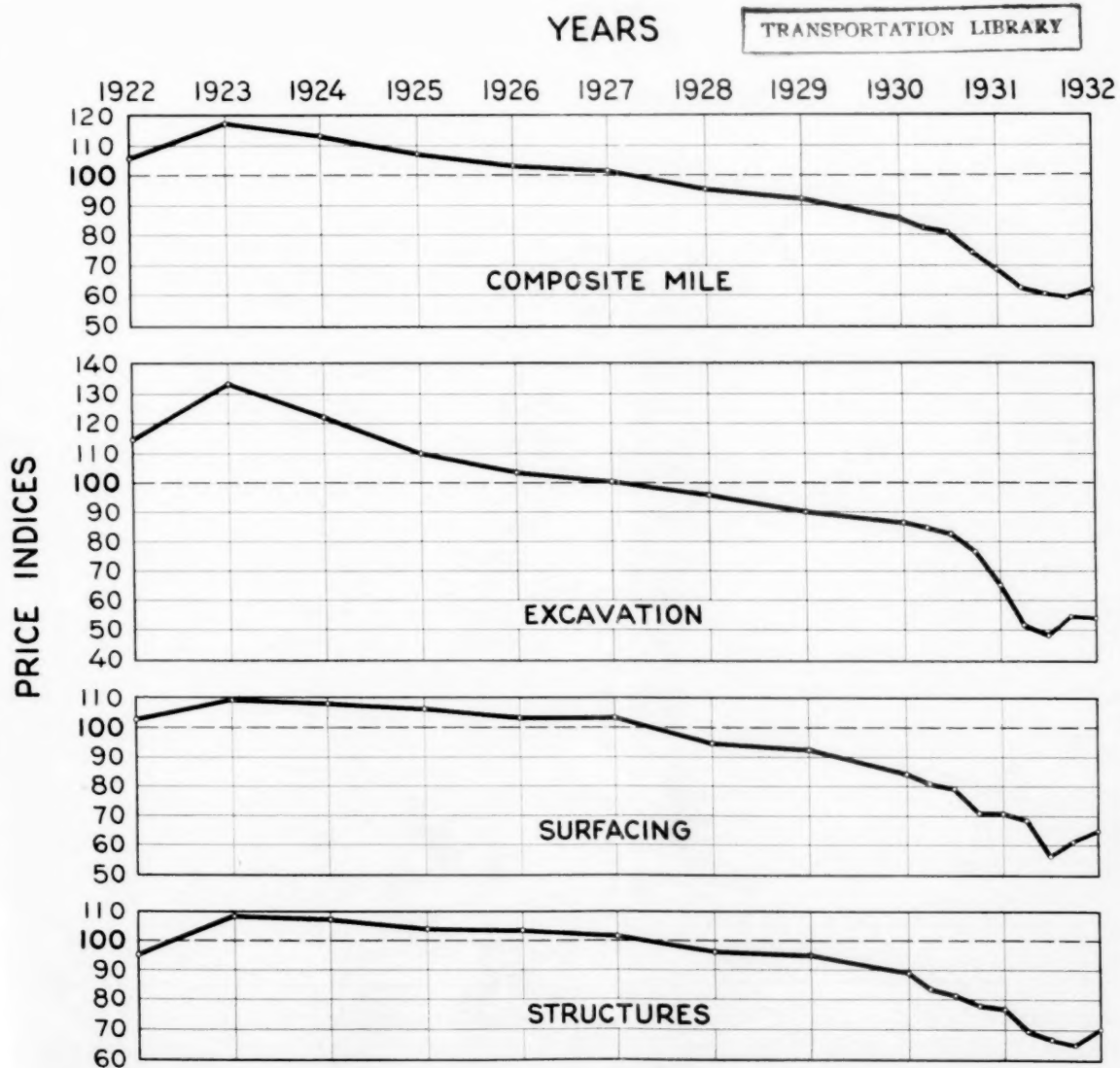


UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF PUBLIC ROADS



VOL. 14, NO. 3

MAY 1933



# PUBLIC ROADS

▶▶▶ A Journal of  
Highway Research

Issued by the

UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF PUBLIC ROADS

G. P. St. CLAIR, Editor

Volume 14, No. 3

May 1933

*The reports of research published in this magazine are necessarily qualified by the conditions of the tests from which the data are obtained. Whenever it is deemed possible to do so, generalizations are drawn from the results of the tests; and, unless this is done, the conclusions formulated must be considered as specifically pertinent only to the described conditions*

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# THE ILLINOIS FINANCIAL SURVEY

Digest of a Survey of the Finances of Illinois in 1930, with Special Reference to Highways, Conducted by the Bureau of Public Roads and the University of Wisconsin

**T**HIS STUDY of highway finance in Illinois is one of a series conducted by the United States Bureau of Public Roads in cooperation with the University of Wisconsin and various State highway departments, involving expenditures for highway purposes and the incidence of taxes for these and other purposes. The Illinois survey is based on the calendar year 1930.<sup>1</sup> The following summary of the comprehensive report made by the investigators has been prepared by the Division of Highway Transport of the Bureau in order to make the results available in concise form. The arrangement of material follows that of the Wisconsin summary for greater ease of comparison.<sup>2</sup>

The calendar year 1930 was selected for the study because of its being a United States census year, as well as the latest year for which data from Cook County could be obtained. It is also the same year for which the similar studies in Wisconsin and Michigan were made.

To classify the incidence of taxation, the State was divided into groups of governmental units and into classes of residence. To distribute highway expenditures, the highway classifications in use in the State were adopted.

Division into groups of governmental units and classes of residence was as follows:

The State government.

The counties:

*Group 1.*—All counties with a population of over 400 persons per square mile in 1930.

*Group 2.*—All counties with a population of from 75 to 400 persons per square mile in 1930.

*Group 3.*—All counties with a population of from 45 to 74 persons per square mile in 1930.

*Group 4.*—All counties with a population of from 30 to 44 persons per square mile in 1930.

*Group 5.*—All counties with a population of from 20 to 29 persons per square mile in 1930.

The municipalities, or local government units:

Townships (embracing all rural areas outside of incorporated municipalities).<sup>3</sup>

Incorporated places having a population of 2,500 or less.

Incorporated places having a population of 2,500 to 15,000.

Incorporated places having a population of 15,000 to 75,000.

Incorporated places having a population of 75,000 to 400,000.

The city of Chicago.

The purposes of the investigation were as follows: (1) To study and analyze the direct and indirect highway receipts and disbursements of the State and of the counties, townships, municipalities, and other political subdivisions thereof; (2) to develop facts and information showing the effect of highway and related taxes on property of all kinds; and (3) to develop the total amount of revenues raised for all other governmental purposes of the State, counties, and local units as compared with the revenues raised for highways, bridges, and streets.

Illinois was selected as a field for study partly because of the representative character of its centralized highway development and partly because the facts as to receipts, expenditures, and debts of the State had never before been assembled. It was believed of value, therefore, to present information relative to the highway situation in Illinois, and also to obtain general financial statistics for use in intelligently planning future Illinois highway programs.

It is natural that these exhaustive investigations should reveal many incidental facts. This has been the case in Illinois, where certain conditions have been noted which appear worthy of mention: (1) There was apparent, quite generally, evidence of conscientious efforts on the part of most local fiscal agents in all branches of the State government to carry on their work in a satisfactory and cooperative way under difficult and complex conditions which seemed to the investigator to be most discouraging; (2) the fiscal system and records of the State-wide organization of counties and local units are cumbersome and unscientific; (3) the State has no central accounting control of any kind; (4) the taxing authority is excessively subdivided; and (5) the existing organization automatically creates unduly heavy overhead for local road administration.

The reader should bear in mind that the present study relates only to the year 1930. Students of taxation problems will readily realize that the situation here portrayed differs somewhat from that existing today in Illinois and Chicago. The value of this study, however, lies in its analysis of fundamental relationships between taxes and expenditures, and is not diminished by temporary and abnormal conditions affecting tax collections.

In considering the financial data for Illinois, care must be used to make proper allowance for the great influence exerted by the city of Chicago upon all trends and averages. In this city were concentrated over 44 percent of the population, over 31 percent of all motor vehicles, and over 45 percent of the assessed valuation of the entire State of Illinois. Upon taxpayers of this city

<sup>1</sup> The investigation was directed by Henry R. Trumbower, professor of economics at the University of Wisconsin and economist for the Bureau of Public Roads, assisted by the late A. R. Hirst, engineer, and H. R. Briggs, statistician. The Division of Highways, Illinois Department of Public Works and Buildings, cooperated in making the facts and data available. The full report was recently published by the State of Illinois, under the title "Economic Survey of Illinois."

<sup>2</sup> For results of the Wisconsin survey, see the April 1933 issue of PUBLIC ROADS.

<sup>3</sup> There are in Illinois incorporated cities, villages, and towns. All such municipalities are included in the classification of incorporated places.

were levied more than 55 percent of all taxes levied within the State; and more than 52 percent of the total public expenditures in Illinois in 1930 was made in Chicago.

#### GOVERNMENTAL SYSTEM DESCRIBED

The State Government is of the usual type, with a General Assembly composed of 2 houses, a Governor and other State elective offices, 9 executive departments and other appointive bodies.

There is a State tax commission the duties of which are to fix the valuation of railroads and certain property of corporations, and generally to supervise local property taxation.

There are two distinct types of county government—17 counties in the southern part of the State have a county unit system and 85 counties have the township form of organization; in Cook County there is a special form of county organization.

Local government is complex, with many concurrent overlapping governmental bodies. The taxpayer may find himself subject to concurrent property taxes levied by the following agencies: State, county, township, village or city, high-school district, common-school district, sanitary district, forest-preserve district, park district, and mosquito-abatement district, or 10 governmental agencies. And, in addition, he may be subject to special assessments for streets, sidewalks and sewers. Each of these agencies has its own set of officers, its own records, and an authority to levy taxes and incur indebtedness. In this study it has not been the practice to divide the units of government further than the townships and incorporated places. Other minor governmental areas have been treated as parts of the larger units containing them.

#### POPULATION AND ASSESSED VALUATION

In 1930 the population of Illinois was 7,630,654. Concentration of population was primarily urban—6,286,995 persons being inhabitants of incorporated places and 1,343,659 being residents of unincorporated territory. These urban populations tend to concentrate in metropolitan areas, as shown by the fact that 4,486,441 persons live in cities of over 25,000. Of these, 3,376,438 live in the city of Chicago.

The assessed valuation of all taxable property in Illinois in 1930 was \$7,718,657,700. Twenty-six percent of the assessed valuation was in the townships; 6 percent in incorporated places having a population up to 2,500; 8.8 percent in incorporated places having a population of 2,500 to 15,000; 11.3 percent in places having a population of 15,000 to 75,000; 2.2 percent in places having a population of 75,000 to 400,000; and 45.7 percent was in Chicago. Thus, 26 percent of the valuation was in the rural areas, and 74 percent in the urban areas.

So far as could be ascertained, real estate in Illinois was assessed in 1930 at from 30 to 40 percent of its actual value, and personal property at only nominal values.

The report on Illinois indicates that many of the relationships found to exist in Wisconsin are duplicated. Conspicuous among these are the substantial contributions to rural areas from the various municipal groups. There is an indication, however, that the large metropolitan centers such as Milwaukee in Wisconsin, Chicago in Illinois, and Detroit in Michigan are not only unique in the State but sometimes have a tendency to alter very substantially, or even to reverse, observed tendencies.

#### HIGHWAY SYSTEMS IN 1930

In 1930 there were three systems of rural highways in Illinois.

Of the rural highway system, 10,098 miles, or 10.4 percent of the total, comprise the State primary system. This system is under the jurisdiction of the Illinois Department of Public Works and Buildings, Division of Highways. It is a system designed as a State trunk system and is for the most part well paved.

Seventeen thousand three hundred sixty-nine miles, or 17.9 percent of the total, comprise the county highway system. This system is under the joint jurisdiction of the counties and the State Department of Public Works and Buildings. It serves principally county travel. The larger part of this system consists of earth roads.

Seventy-one and seven tenths percent of the total rural highways of the State are local roads under the jurisdiction of local authorities. It is interesting to note that these locally administered roads comprise a mileage nearly seven times as extensive as that of the system under direct control of the Division of Highways. With the exception of a small percentage of gravel, earth roads comprise practically all of this system. Table 1 classifies the rural mileages by highway systems and by type of surfacing. The financing of each of these types will be discussed in later pages.

The total rural highway mileage of the State amounts to 97,234 miles, or an average of 1.735 miles per square mile of territory. This is the mileage as traveled in 1930 and may vary somewhat from other mileages based on systems as officially laid out or designated.

TABLE 1.—Mileage and surfacing of rural highways in 1930

System	Mileage and type of surfacing								Total		
	Concrete		Bitum- inous macadam		Stone, gravel, etc.		Earth				
	Miles	Per- cent	Miles	Per- cent	Miles	Per- cent	Miles	Per- cent	Miles	Per- cent	Per- cent of total
State.....	7,683	76.1	26	0.3	121	1.2	2,268	22.4	10,098	100.0	10.4
County.....	1,453	8.4	130	.7	4,726	27.2	11,060	63.7	17,369	100.0	17.9
Township.....	83	.1	90	.1	11,190	16.1	38,404	83.7	69,767	100.0	71.7
Total.....	9,219	9.5	246	.2	16,037	16.5	71,732	73.8	97,234	100.0	100.0

At the end of 1930 there were 25,502 miles of surfaced rural highways in Illinois, or 26.2 percent of all rural highways. On the State system, 77.6 percent were surfaced; on the county system, 36.3 percent; and on the local roads, 16.3 percent.

Of the total rural highway mileage in the State, 73.8 percent is earth.

The Illinois State highway system, which is under the control of the Division of Highways, and for which the department is directly responsible for construction and maintenance, is divided into 2,724 miles known as the primary Federal-aid system; 4,252 miles called the secondary Federal-aid system; and the remaining 3,122 miles are classed as other State highways. The entire system is commonly known as the State primary system, or the State bond issue road system.

The funds for this State primary system are derived from State imposts upon motor vehicles, from Federal

aid and from bond issues. As the bond issues are being retired out of the motor-vehicle imposts, in the final analysis the entire program will be carried by these imposts, plus the Federal aid.

Few facts are available as to city and village streets in the State of Illinois. Nothing is known as to their total mileage or as to their types of surface. It is known that out of the \$166,298,900 expended on all highways in Illinois in 1930, \$100,100,200, or two thirds of the total of all highway expenditures of the year, were local expenditures on municipal streets. Of this amount, \$75,873,300 were expended by the city of Chicago alone.

#### METHOD OF OBTAINING DATA DESCRIBED

Despite difficulties which at first seemed insurmountable—including the absence of a central assembly of financial and tax statistics, the scarcity of public reports of counties and municipalities, and the diversified and complicated systems of municipal accounting existing in Illinois—preliminary visits to some of the leading counties and cities showed that much information was available.

It was decided, therefore, to obtain the primary data for the counties and the larger cities by a personal visit to each, for the purpose of analyzing and collecting the material on the premises. The result is that on probably half of the counties and the majority of the larger cities, accurate detailed data have been secured from audit reports. On the majority of the remaining counties and cities, good information has been obtained which was compiled directly from the county records. Of the balance of the counties and cities which were for the most part small with poor records, the best possible estimates were

made from all of the information available on the premises, plus general information obtained by interviewing the officials.

Encouraged by the results obtained from the counties, the investigators decided to attempt a simple financial questionnaire for the townships, villages, and minor cities. The results exceeded expectations, over 1,000 good replies being received. These for the most part indicate a conscientious, intelligent effort on the part of the local clerks to give the data correctly. Through averages and ratios based on these replies, a correct picture of the minor local Illinois governmental units can be drawn.

To obtain figures on such matters as mileage traveled by motor vehicles, gasoline consumed, and taxes paid, questionnaires were sent to many thousands of motor vehicle owners. Additional data were secured through analysis of a large sample of car registrations. Further details on these points will be found in the section on "Motor-Vehicle Registration, Taxes, and Travel." (See p. 41.)

#### TAXES LEVIED AND INCIDENCE OF TAXATION

Table 2 gives the total taxes levied for all purposes in Illinois in 1930 by the State government, the counties, and the several classes of local government unit. The importance of Chicago in the financial set-up of the State is emphasized by the fact that of all taxes levied in Illinois in 1930, 41.2 percent were imposed by the city of Chicago.

Since all State and county imposts and taxes are ultimately paid by taxpayers in townships and incorporated places, the amounts shown in the above table may be restated to show their distribution as ultimately paid. This distribution is shown in table 3. Here again it is found that 55.2 percent of all the charges in 1930 were levied on taxpayers in Chicago.

#### ILLINOIS TAXES IN 1930

**Total taxes and imposts levied for all purposes in Illinois in 1930 were \$582,407,100. Taxation of general property totaled \$427,317,600; all motor-vehicle imposts, including gasoline tax, \$54,149,100; other sources, including insurance and inheritance taxes, valuation tax on railroads, corporation imposts, certain local imposts, and miscellaneous State revenues, \$100,940,400.**

**Of the total taxes and imposts levied, rural taxpayers were charged with \$71,516,100, or 12.3 percent; those in incorporated places having a population up to 2,500, \$38,011,300, or 6.5 percent; in places of 2,500 to 15,000 population, \$65,583,100, or 11.2 percent; in places of 15,000 to 75,000 population, \$73,745,800, or 12.7 percent; in places of 75,000 to 400,000 population, \$12,068,300, or 2.1 percent; in Chicago, \$321,482,500, or 55.2 percent.**

**The average actual tax rates on general property, per \$100 valuation, were as follows: Rural, \$2.81; incorporated places up to 2,500 population, \$4.59; places 2,500 to 15,000 population, \$6.20; places 15,000 to 75,000 population, \$5.71; places 75,000 to 400,000 population, \$4.74; Chicago, \$7.08.**

**Rural motor vehicles owners paid in license fees and gasoline taxes an average of \$21.77; those resident in places up to 2,500 population, \$25.81; in places 2,500 to 15,000 population, \$28.19; in places 15,000 to 75,000 population, \$30.31; in places 75,000 to 400,000 population, \$21.53; in Chicago, \$31.41.**

TABLE 2.—Total of all State and local charges imposed for all purposes by the State and its subdivisions for collection in 1930

Imposed by—	Amount	Per cent	Per capita
State.....	\$136,227,300	23.4	\$17.85
County.....	45,208,900	7.8	5.92
Townships.....	40,407,800	6.9	30.07
Places up to 2,500.....	22,328,600	3.8	34.28
Places 2,500 to 15,000.....	44,079,700	7.6	46.41
Places 15,000 to 75,000.....	47,140,200	8.1	42.14
Places 75,000 to 400,000.....	7,180,600	1.2	37.63
Chicago.....	239,834,000	41.2	71.03
Total.....	\$582,407,100	100.0	76.32

TABLE 3.—Incidence of all State and local charges imposed in 1930

Payable by taxpayers in—	Amount	Per cent	Per capita
Townships.....	\$71,516,100	12.3	\$53.22
Places up to 2,500.....	38,011,300	6.5	58.37
Places 2,500 to 15,000.....	65,583,100	11.2	69.05
Places 15,000 to 75,000.....	73,745,800	12.7	65.92
Places 75,000 to 400,000.....	12,068,300	2.1	63.24
Chicago.....	321,482,500	55.2	95.21
Total.....	\$582,407,100	100.0	76.32

The sources of total Illinois revenue for all purposes in 1930 are shown in table 4. It is to be noted that in these tabulations there have been included both the taxes levied but not fully collected, principally general property taxes; and taxes actually collected, such as motor-vehicle, corporation, inheritance, and other imposts. (See p. 45.)

TABLE 4.—Sources of revenue by type of tax or revenue

Type of tax	Amount	Per cent	Per capita
Ad valorem general taxes.....	\$427,317,600	73.4	\$56.00
Ad valorem railroad taxes.....	31,272,400	5.4	4.10
Other railroad taxes.....	2,478,900	.4	.32
State motor-vehicle imposts.....	46,974,600	8.1	6.15
Local vehicle imposts.....	7,174,500	1.2	.94
Other local imposts.....	41,570,400	7.1	5.45
Inheritance taxes.....	12,802,100	2.2	1.68
Insurance taxes.....	6,342,000	1.1	.83
Corporation imposts.....	4,088,600	.7	.54
Miscellaneous State revenues.....	2,386,000	.4	.31
Total.....	582,407,100	100.0	76.32

RECAPITULATION			
General property taxes.....	\$427,317,600	73.4	\$56.00
Railroad taxes.....	33,751,300	5.8	4.42
Motor-vehicle imposts.....	54,149,100	9.3	7.09
Other local receipts.....	41,570,400	7.1	5.45
Other State receipts.....	25,618,700	4.4	3.36
Total.....	582,407,100	100.0	76.32

## TAXATION DATA SUMMARIZED

In order to summarize the total revenues of the State as shown by table 4, another distribution of these revenues to show their incidence by general types of taxes and by classes of places in which they are paid is given in table 5. The item "other taxes" includes imposts on

TABLE 5.—Incidence and classification of all taxes levied in 1930

Payable by taxpayers in—	General property taxes		Imposts on motor vehicles <sup>1</sup>		Other taxes		All taxes	
	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent
Townships.....	\$56,409,700	13.2	\$4,828,600	8.9	\$10,277,800	10.2	\$71,516,100	12.3
Places up to 2,500.....	21,263,500	5.0	7,255,100	13.4	9,492,700	9.4	38,011,300	6.5
Places 2,500 to 15,000.....	41,953,700	9.8	8,543,600	15.8	15,085,800	14.9	65,583,100	11.3
Places 15,000 to 75,000.....	49,698,600	11.6	9,900,300	18.3	14,146,900	14.0	73,745,800	12.6
Places 75,000 to 400,000.....	8,187,200	1.9	1,911,800	3.5	1,969,300	2.0	12,068,300	2.1
Chicago.....	249,804,900	58.5	21,709,700	40.1	49,967,900	49.5	321,482,500	55.2
	100.0		100.0		100.0		100.0	
Total.....	427,317,600	73.4	54,149,100	9.3	100,940,400	17.3	582,407,100	100.0

<sup>1</sup> Includes license fees, \$18,447,200; gasoline tax, \$28,246,700; oil-inspection fees, \$280,700; and wheel taxes, \$7,174,500. (See pp. 41 to 44 for detailed discussion.)

railroad property, inheritance taxes, insurance taxes, corporation imposts, and miscellaneous State and local imposts. The ad valorem railroad taxes should properly be classified under general property taxes, but no break-down was available on this item taken alone.

Table 6 gives, in the first column of figures, the tax rates per \$100 valuation required to meet the total charges levied upon general property in each of the several classes of local government unit. For purposes of comparison, the second column gives the rates which would have been required if all taxation had been levied upon general property; and the last column gives

the percentages which general property taxes were of all levies.

TABLE 6.—General property tax rates per \$100 valuation in 1930, and their relation to the total of all imposts

Unit of government in which taxes were payable	Actual tax rate on general property tax as levied	Tax rate needed to raise all taxes by general property tax levies	Percentage that general property taxes are of all taxes and imposts
Townships.....	\$2.81	\$3.56	78.9
Places up to 2,500.....	4.59	8.20	55.9
Places 2,500 to 15,000.....	6.20	9.69	64.0
Places 15,000 to 75,000.....	5.71	8.47	67.4
Places 75,000 to 400,000.....	4.74	6.98	67.8
Chicago.....	7.08	9.12	77.7
Average for State.....	5.54	7.55	73.4

## STREET AND HIGHWAY REVENUES OBTAINED FROM GENERAL PROPERTY AND MOTOR-VEHICLE TAXES

The amount of \$150,266,700 was levied in the State of Illinois in 1930 for street and highway purposes. Of this sum, the charges imposed directly against motor vehicles and their owners and operators was somewhat over one third of the total, the balance being charges against property. Table 7 shows these facts in detail.

TABLE 7.—Taxation imposed for street and highway purposes in 1930

Type of tax	Amount	Per cent	Per capita
On general property:			
County.....	\$7,076,200	4.7	\$6.93
Local.....	29,122,800	19.4	3.81
Special.....	56,260,200	37.4	7.37
Railroad.....	3,658,400	2.4	.48
Total.....	96,117,600	63.9	12.59
On motor vehicles:			
License fees.....	18,447,200	12.3	2.42
Fuel tax.....	28,246,700	18.8	3.70
Oil inspection fees.....	280,700	.2	.04
Privilege or "wheel" taxes (local).....	7,174,500	4.8	.94
Total.....	54,149,100	36.1	7.10
Grand total.....	150,266,700	100.0	19.69

TABLE 8.—Incidence of taxes imposed for street and highway purposes in 1930, classified by groups of places

Payable by taxpayers and motor-vehicle owners in—	Amount	Per cent	Per capita
Townships.....	\$16,996,900	11.3	\$12.65
Places up to 2,500.....	15,059,300	10.0	23.12
Places 2,500 to 15,000.....	21,479,300	14.3	22.62
Places 15,000 to 75,000.....	22,114,800	14.7	19.77
Places 75,000 to 400,000.....	3,702,800	2.5	19.40
Chicago.....	70,913,600	47.2	21.00
Total.....	150,266,700	100.0	19.69

Table 8 shows the distribution of the street and highway levies as amounts paid (or payable) by taxpayers and motor-vehicle owners in the several classes of local government unit. The amount given for each class of place is the sum of all taxes imposed for highway purposes, including local privilege taxes and portions of the local general property tax levies, local special assessments, and local railroad taxes<sup>4</sup>; that portion of the

<sup>4</sup> Out of a total of \$31,272,400 in local railroad taxes, \$3,658,400 were levies for local roads and streets.

county property taxes allocated to the communities on the basis of relative property values; and the amount of State gasoline and vehicle fees contributed by motor vehicle owners in these groups of places as determined by facts ascertained in this study.

For the cities, this includes the contributions for local street improvements as well as the urban share of the rural highway program. The same facts classified by county groups instead of groups of places are shown in table 9.

TABLE 9.—Incidence of taxes specifically imposed for street and highway purposes in 1930, classified by groups of counties

County group:	Payable by taxpayers and motor-vehicle owners in—	Amount	Per cent	Per capita
1.....		\$87,512,900	58.2	\$21.98
2.....		29,217,100	19.5	17.61
3.....		18,888,100	12.6	17.31
4.....		12,057,800	8.0	16.83
5.....		2,590,800	1.7	14.27
Total.....		150,266,700	100.0	19.69

#### MOTOR-VEHICLE REGISTRATION, TAXES, AND TRAVEL

**Registrations.**—There were 1,642,628 motor vehicles of all types registered in the State of Illinois in 1930, or 1 for every 4.6 persons. The ratio of passenger cars was 1 to every 5.3 persons, and of motor trucks and busses 1 to every 37.1 persons.

In order to allocate motor vehicles among the local units of government, a sample of 50,000 motor-vehicle registrations was tabulated, and the situs of vehicles whose location was uncertain was verified by correspondence. On the basis of the distribution shown by this sample, an approximate allocation was made, by place of ownership, of all registered motor vehicles, among the several county groups and the classes of local unit. This distribution is shown in table 10. The data are subdivided between passenger automobiles on the one hand and trucks and busses on the other.

TABLE 10.—Number of registered automobiles and trucks and busses in 1930, distributed by place of ownership<sup>1</sup>

County group	Place of ownership						Total	Percentage of State total
	Townships	Places up to 2,500	Places 2,500 to 15,000	Places 15,000 to 75,000	Places 75,000 to 100,000	Chicago		
Group 1:								
Automobiles.....	5,134	10,268	35,937	71,875	447,219	570,433	34.8	19.4
Trucks and busses.....	2,003	1,233	4,161	6,010	63,644	77,051	4.7	2.5
Total.....	7,137	11,501	40,098	77,885	510,863	647,484	39.4	
Group 2:								
Automobiles.....	36,500	45,649	77,287	138,879	47,525	345,849	21.1	11.3
Trucks and busses.....	11,346	4,992	8,447	21,897	6,671	53,353	3.2	2.8
Total.....	47,846	50,641	85,734	160,776	54,196	399,202	24.3	
Group 3:								
Automobiles.....	59,761	77,930	87,348	54,800	—	279,839	17.0	15.8
Trucks and busses.....	12,906	6,808	11,458	7,356	—	38,528	2.3	3.4
Total.....	72,667	84,738	98,806	62,156	—	318,367	19.4	
Group 4:								
Automobiles.....	59,796	92,671	43,170	—	—	195,637	11.9	12.5
Trucks and busses.....	14,661	9,497	6,673	—	—	30,831	1.9	3.2
Total.....	74,457	102,168	49,843	—	—	226,468	13.8	
Group 5:								
Automobiles.....	15,605	24,953	4,500	—	—	45,058	2.7	5.3
Trucks and busses.....	2,918	2,763	368	—	—	6,049	0.4	0.7
Total.....	18,523	27,716	4,868	—	—	51,107	3.1	
Total for State:								
Automobiles.....	176,805	251,471	248,242	265,554	47,525	1,436,816	87.5	
Trucks and busses.....	43,834	25,293	31,107	35,263	6,671	113,168	6.8	
Total.....	220,639	276,764	279,349	300,817	54,196	1,550,000	100.0	
Percentage of State total.....	13.4	16.8	17.0	18.4	3.3	31.1	100.0	

<sup>1</sup> The distribution shown in this table is based on the analysis of a sample of 50,000 motor-vehicle registrations.

**Registration fees.**—Total license fees paid in 1930 amounted to \$18,477,200. Passenger cars paid fees of \$8, \$12 or \$20, depending on the horsepower, and motor trucks and busses paid \$10, \$12, \$35, \$75, or \$250.

The total cost of the entire motor-vehicle department, including the licensing division, the investigators' division, and the chauffeurs' licensing division, was \$667,036, which averaged 41 cents per motor vehicle registered. The actual cost of the automobile license department alone, without its allied investigators' and chauffeurs' divisions, was \$482,160, or 29 cents per vehicle registered. The entire cost of the division was 3.6 percent of all the fees collected, and the cost of the automobile license department alone was 2.6 percent of all fees collected.

From the relationships disclosed by the sample of 50,000 vehicles, it was possible to locate motor-vehicle licenses paid by places, and the computations were found to give almost exactly the same totals by counties as were the actual amounts reported by the State authorities as having been paid in the same counties. Table 11 gives total registration fees paid and amounts

TABLE 11.—Motor-vehicle registrations, persons per vehicle, and registration fees paid, distributed by place of ownership among the several classes of local government unit

Place of ownership	Registration in 1930	Percentage of total	Persons per vehicle	Registration fees in 1930	Percentage of State total	Payments per vehicle
Townships:						
Automobiles.....	176,805	12.3	7.6	\$1,731,400	12.5	\$9.79
Trucks and busses.....	43,834	21.3	30.7	555,800	12.1	12.67
Total.....	220,639	13.4	5.9	2,287,200	12.4	10.37
Places up to 2,500:						
Automobiles.....	251,471	17.5	2.6	2,236,500	16.1	8.89
Trucks and busses.....	25,293	12.3	25.7	538,800	11.7	21.30
Total.....	276,764	16.8	2.4	2,775,300	15.0	10.03
Places 2,500 to 15,000:						
Automobiles.....	248,242	17.3	3.8	2,364,200	17.1	9.52
Trucks and busses.....	31,107	15.1	30.5	690,500	15.0	22.20
Total.....	279,349	17.0	3.4	3,054,700	16.6	10.94
Places 15,000 to 75,000:						
Automobiles.....	265,554	18.5	4.2	2,650,900	19.2	9.99
Trucks and busses.....	35,263	17.1	31.7	909,100	19.7	25.79
Total.....	300,817	18.4	3.7	3,560,000	19.3	11.83
Places 75,000 to 100,000:						
Automobiles.....	47,525	13.3	4.0	493,300	13.6	10.38
Trucks and busses.....	6,671	3.2	28.6	180,600	3.9	27.09
Total.....	54,196	3.3	3.5	673,900	3.7	12.43
Chicago:						
Automobiles.....	447,219	31.1	7.5	4,364,800	31.5	9.76
Trucks and busses.....	63,644	31.0	53.1	1,731,300	37.6	27.20
Total.....	510,863	31.1	6.6	6,096,100	33.0	11.93
State totals:						
Automobiles.....	1,436,816	87.5	5.3	13,841,100	75.0	9.63
Trucks and busses.....	205,812	12.5	37.1	4,606,100	25.0	22.38
Total.....	1,642,628	100.0	4.6	18,447,200	100.0	11.23

<sup>1</sup> Percentage of total for automobiles.

<sup>2</sup> Percentage of total for trucks and busses.

per vehicle, distributed, by place of ownership, among the several classes of local government unit. The average fee paid for passenger automobiles was \$9.63; for motor trucks and busses, \$22.38; and the average for all motor vehicles registered was \$11.23.

It will be observed that, while the average license fee paid for automobiles does not vary consistently, the fees paid for trucks and busses, as well as the averages for all motor vehicles, increase fairly steadily as the place of residence becomes more urban. It is also notable that trucks and busses, which constitute only 12.5 percent of the registrations, pay 25 percent of the license fees.

**Mileage traveled and gasoline consumption.**—Data on the average travel and gasoline consumption by Illinois trucks, busses, and automobiles in 1931 were obtained

through questionnaires sent to 20,000 motor vehicle owners in the State. As the questionnaire survey was conducted in 1932, it was impossible to expect motor vehicle owners to respond intelligently to requests for information covering the operation of their cars for any period except the year immediately preceding. For this reason the year 1931 was chosen, rather than 1930, which was the year covered by the financial survey. The sample was carefully selected to obtain a distribution in proportion to the motor-vehicle ownership of the various places, and every check indicates that a fair cross section was received. Usable replies were received from 7,150 owners.

The average mileage traveled and the average gasoline consumption by Illinois motor vehicles in 1931 are summarized in table 12. Ownership of the vehicles is classified according to place of residence of the owner. No attempt was made to obtain data as to the classification of the roads and streets on which this travel was performed. The facts summarized below were determined by questionnaire methods.

TABLE 12.—Average miles traveled and average gasoline consumption in 1931, by place of ownership

Place of ownership	Number of reports tabulated			Average gasoline consumption			Average miles traveled		
	Automobiles	Trucks and busses	All vehicles	Automobiles	Trucks and busses	All vehicles	Automobiles	Trucks and busses	All vehicles
Townships.....	1,040	82	1,122	425	525	432	6,709	6,761	6,713
Places up to 2,500.....	1,030	92	1,122	567	997	603	8,651	10,154	8,775
Places 2,500 to 15,000.....	1,242	59	1,301	644	881	655	9,229	9,998	9,264
Places 15,000 to 75,000.....	1,278	85	1,363	672	987	691	9,174	9,294	9,176
Places 75,000 to 400,000.....	173	16	189	701	982	725	9,070	8,502	9,022
Chicago.....	1,881	172	2,053	666	1,500	736	8,546	9,285	8,608
State totals and averages.....	6,644	506	7,150	611	1,076	644	8,537	9,079	8,575

Further analysis of mileage and gasoline consumption, showing details of travel by groups of counties and by the two principal classes of motor vehicles, is given in table 13. The average passenger-car mileage for the State as a whole is shown to be 8,537 miles, with an average of 611 gallons of gasoline consumed.

Motor trucks and busses as a whole, in both urban and rural districts, traveled a slightly higher mileage than was the case with passenger automobiles. More significant is the fact that the average automobile consumed only 60 percent as much gasoline as was the average for trucks and busses. In the city of Chicago the gasoline consumption of trucks and busses was about two and one half times that of the average car.

No information was obtained as to the respective use of automobiles for business or pleasure purposes, or on the extent of travel outside of the State of Illinois.

From the facts ascertained by this study as to the location of motor vehicles, average miles traveled per vehicle, and the average gasoline consumption, it was possible to compute the total miles traveled in the State, and the total gasoline consumption. Some of these computations, which, of course, are only the most accurate approximations which can be made with the material available, are presented in table 14. Total mileage and gasoline consumption data are given for automobiles and for trucks and busses owned in each of the classes of local governmental unit.

TABLE 13.—Motor-vehicle travel in 1931 by place of ownership in the 5 groups of counties<sup>1</sup>

Item	County group					State totals and averages
	1	2	3	4	5	
Travel by automobiles:						
Average mileage traveled by automobiles owned in:						
Townships.....	7,733	7,621	6,447	6,052	6,052	6,709
Places up to 2,500.....	8,954	8,865	8,651	8,541	8,368	8,651
Places 2,500 to 15,000.....	9,414	9,171	8,961	9,597	8,761	9,229
Places 15,000 to 75,000.....	8,560	9,238	9,928	.....	.....	9,174
Places 75,000 to 400,000.....	.....	9,070	.....	.....	.....	9,070
Chicago.....	8,546	.....	.....	.....	.....	8,546
Total.....	8,632	8,858	8,493	7,986	7,180	8,537
Average gallons of gasoline consumed.....	663	634	560	510	476	611
Travel by motor trucks and busses:						
Average mileage traveled by motor trucks owned in:						
Townships.....	8,416	8,464	6,034	4,657	4,743	6,761
Places up to 2,500.....	7,257	7,531	13,907	9,066	12,086	10,154
Places 2,500 to 15,000.....	8,333	10,952	7,071	12,166	10,480	9,998
Places 15,000 to 75,000.....	5,264	10,089	9,970	.....	.....	9,204
Places 75,000 to 400,000.....	.....	.....	.....	.....	.....	8,502
Chicago.....	9,285	.....	.....	.....	.....	9,285
Total.....	8,881	9,351	9,606	8,417	9,137	9,079
Average gallons of gasoline consumed.....	1,375	923	850	787	991	1,076
Travel by all motor vehicles:						
Average mileage traveled by motor vehicles owned in:						
Townships.....	7,794	7,704	6,422	5,969	5,972	6,713
Places up to 2,500.....	8,791	8,754	9,025	8,585	8,750	8,775
Places 2,500 to 15,000.....	9,402	9,290	8,884	9,737	8,980	9,264
Places 15,000 to 75,000.....	8,443	9,300	9,931	.....	.....	9,176
Places 75,000 to 400,000.....	.....	9,022	.....	.....	.....	9,022
Chicago.....	8,608	.....	.....	.....	.....	8,608
Total.....	8,649	8,806	8,562	8,016	7,344	8,575
Average gallons of gasoline consumed.....	712	657	578	529	519	644

<sup>1</sup> This table shows the variation in the mileage and gasoline consumption in the several groups of counties as indicated by the highway questionnaire sent out and tabulated during this survey.

TABLE 14.—Mileage traveled, gasoline consumption, and gasoline-tax payments by automobiles and by trucks and busses, distributed by place of ownership

Place of ownership	Registrations in 1930	Total travel	Percentage of total	Total gasoline consumption	Total gasoline tax paid	Percentage of total	Average per vehicle
		Millions of vehicle-miles		Thousands of gallons			
Townships:							
Automobiles.....	176,805	1,186.2	.....	75,142	\$1,926,400	.....	\$10.90
Trucks and busses.....	43,834	296.4	.....	23,013	590,000	.....	13.46
Total.....	220,639	1,482.6	10.5	98,155	2,516,400	8.9	11.41
Places up to 2,500:							
Automobiles.....	251,471	2,175.5	.....	142,584	3,711,300	.....	14.76
Trucks and busses.....	25,293	256.8	.....	25,217	656,400	.....	25.95
Total.....	276,764	2,432.3	17.2	167,801	4,367,700	15.5	15.78
Places 2,500 to 15,000:							
Automobiles.....	248,242	2,291.0	.....	159,868	4,114,300	.....	16.57
Trucks and busses.....	31,107	311.0	.....	27,404	705,300	.....	22.67
Total.....	279,349	2,602.0	18.3	187,272	4,819,600	17.1	17.25
Places 15,000 to 75,000:							
Automobiles.....	265,554	2,436.2	.....	178,452	4,651,200	.....	17.52
Trucks and busses.....	35,263	324.6	.....	34,805	907,100	.....	25.72
Total.....	300,817	2,760.8	19.5	213,257	5,558,300	19.6	18.48
Places 75,000 to 400,000:							
Automobiles.....	47,525	431.1	.....	33,315	864,900	.....	18.20
Trucks and busses.....	6,671	56.7	.....	6,551	170,100	.....	25.50
Total.....	54,196	487.8	3.4	39,866	1,035,000	3.7	19.10
Chicago:							
Automobiles.....	447,219	3,821.9	.....	297,848	7,534,700	.....	16.85
Trucks and busses.....	63,644	590.9	.....	95,466	2,415,000	.....	37.95
Total.....	510,863	4,412.8	31.1	393,314	9,949,700	35.2	19.48
State total:							
Automobiles.....	1,436,816	12,341.9	87.0	887,209	22,802,800	80.7	15.87
Trucks and busses.....	205,812	1,836.4	13.0	212,456	5,443,900	19.3	26.45
Total.....	1,642,628	14,178.3	100.0	1,099,665	28,246,700	100.0	17.20

*The gasoline tax.*—The total (net after refunds) gasoline tax paid (at the 1930 tax rate of 3 cents per gallon) was \$28,246,700. The cost of collecting this tax and making the refunds was \$79,805, or \$2.83 per \$1,000 collected.

TABLE 15.—Average and total payments of motor vehicle fees and gasoline taxes by owners of motor vehicles in Illinois in 1930, distributed according to place of ownership

Place of ownership	Payments per vehicle			Total payments					
	Registration fees	Gasoline tax	Total	Registration fees	Gasoline tax	Oil inspection fees	Wheel taxes	All motor vehicle imposts	Percentage of total
Townships.....	\$10.37	\$11.41	\$21.78	\$2,287,200	\$2,516,400	\$25,000		\$4,828,600	8.9
Places up to 2,500.....	10.03	15.78	25.81	2,775,300	4,367,700	43,400	\$68,700	7,255,100	13.4
Places 2,500 to 15,000.....	10.94	17.25	28.19	3,054,700	4,819,600	47,900	621,400	8,543,600	15.8
Places 15,000 to 75,000.....	11.83	18.48	30.31	3,560,000	5,558,300	55,200	726,800	9,900,300	18.3
Places 75,000 to 400,000.....	12.43	19.10	31.53	673,900	1,035,000	10,300	192,600	1,911,800	3.5
Chicago.....	11.93	19.48	31.41	6,096,100	9,949,700	98,900	5,565,000	21,709,700	40.1
State totals and averages.....	11.23	17.20	28.43	18,447,200	28,246,700	280,700	7,174,500	54,149,100	100.0

In addition to data on mileage and gasoline consumption table 14 also gives the total payments of gasoline tax, and the payments per vehicle. The amounts given as gasoline-tax payments do not equal the gallonage consumed multiplied by the tax of 3 cents per gallon. The reason for this apparent discrepancy is that the figures as to gallonage, average mileage, etc., are those obtained from the 1931 questionnaire; while the average tax paid is the actual net 1930 tax collected, apportioned on the basis of the facts as to allocation determined by this study. It is evident that there should be no great change between one year and the next in the proportionate amount of travel in the various groups of places, and the figures as given are, therefore, regarded as representative.

As shown in table 14, the average gasoline tax paid by automobiles was \$15.87; that paid by trucks and busses was \$26.45. The average for all motor vehicles was \$17.20. The amount of gasoline tax paid per vehicle increases rather steadily as the place of residence becomes more urban, township vehicles paying only \$11.41, while Chicago vehicles paid \$19.48.

It will be observed that trucks and busses, which contributed only 13.0 percent of the traffic, paid 19.3 percent of the gasoline taxes.

The proceeds of the gasoline tax are used entirely for State and county highway programs. Two thirds of the tax is retained by the State and the balance returned to the counties. The county share of the gasoline tax may be used either on current highway programs or for the retirement of bonds. The payment of the allotments to counties is under the jurisdiction of the Illinois Division of Highways. Counties cannot receive their allotments until complete plans for the disposition of these funds have been submitted to the Division of Highways and approved by it.

#### TOTAL MOTOR-VEHICLE PAYMENTS SHOWN

The distribution, according to place of ownership, of all registration fees and gasoline taxes paid by owners of motor vehicles is shown in table 15. Both total and per-vehicle figures are given. In addition to the license fees and the gasoline tax, the State imposes an "oil-inspection fee" at the rate of 1 cent per 100 gallons; and various municipalities impose privilege taxes, which are known as "wheel taxes", upon motor vehicles. These payments are also shown; so that table 15 gives the total of all imposts upon motor vehicles and their use in Illinois in 1930.

#### DATA ON MOTOR-VEHICLE TAXES AND TRAVEL SUMMARIZED

Tables 16 and 17 summarize the relationships between population, vehicles registered, registration fees and

TABLE 16.—Percentage comparison of the several classes of local government unit as to population, motor vehicles registered, motor-vehicle taxes paid, and share of total State traffic contributed by vehicles owned in these places

Unit of Government	Population	Motor vehicles registered	Registration fees paid	Gasoline taxes paid	Registration fees and gasoline taxes paid	All motor vehicle imposts paid	Contribution to total traffic
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Townships.....	17.61	13.4	12.4	8.9	10.3	8.9	10.5
Places up to 2,500.....	8.53	16.8	15.0	15.5	15.3	13.4	17.2
Places 2,500 to 15,000.....	12.45	17.0	16.6	17.1	16.9	15.8	18.3
Places 15,000 to 75,000.....	14.66	18.4	19.3	19.6	19.5	18.3	19.5
Places 75,000 to 400,000.....	2.50	3.3	3.7	3.7	3.7	3.5	3.4
Chicago.....	44.25	31.1	33.0	35.2	34.3	40.1	31.1
Total.....	100.00	100.0	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> Includes oil-inspection fees and wheel taxes.

TABLE 17.—Percentage comparison of the several groups of counties as to population, motor vehicles registered, and motor-vehicle taxes paid

County group	Population	Motor vehicles registered	Registration fees paid	Gasoline taxes paid	Registration fees and gasoline taxes paid
	Percent	Percent	Percent	Percent	Percent
1.....	52.19	39.4	41.9	43.2	42.7
2.....	21.74	24.3	25.6	25.8	25.7
3.....	14.30	19.4	17.9	17.3	17.5
4.....	9.39	13.8	12.1	11.2	11.6
5.....	2.38	3.1	2.5	2.5	2.5
Total.....	100.00	100.0	100.0	100.0	100.0

gasoline taxes paid, and traffic, which have been brought out in the preceding paragraphs. Table 16 shows comparisons between the various classes of local government unit; in table 17 the groups of counties are compared.

From these tables and those previously given the following conclusions have been derived:

1. The townships, with 17.61 percent of the population, contained 13.4 percent of the registered motor vehicles; motor-vehicle owners in the townships paid 10.3 percent of the motor-vehicle registration fees and gasoline taxes and contributed 10.5 percent of the total traffic of Illinois vehicles.

2. Incorporated places other than Chicago, with 38.14 percent of the population, contained 55.5 percent of the registered motor vehicles; motor-vehicle owners in these places paid 55.4 percent of the motor-vehicle registration fees and gasoline taxes, and contributed 58.4 percent of the total traffic of Illinois vehicles.

3. Chicago, with 44.25 percent of the population, contained 31.1 percent of the registered motor vehicles;

motor-vehicle owners in Chicago paid 34.3 percent of the motor-vehicle registration fees and gasoline taxes and contributed 31.1 percent of the traffic of Illinois vehicles.

4. Of all imposts on motor vehicles, the owners of motor vehicles in the townships paid 8.9 percent; those in incorporated places other than Chicago paid 51.0 percent; and those in Chicago paid 40.1 percent.

5. The average registration fee paid was \$11.23; the average gasoline tax payment, \$17.20; the total, \$28.43. Both registration fees and gasoline tax payments were found to increase as the place of residence becomes more urban.

6. The average registration fee paid by passenger automobiles was \$9.63; by trucks and busses, \$22.38. The average gasoline-tax payments by passenger automobiles were \$15.87; by trucks and busses, \$26.45. Thus the average payments in registration fees and gasoline taxes were: passenger automobiles, \$25.50; trucks and busses, \$48.83.

7. The owners of motor trucks and busses, which constituted 12.5 percent of the total registrations and contributed 13 percent of the total traffic of Illinois vehicles, paid 25 percent of the registration fees and 19.3 percent of the gasoline taxes.

#### SPECIAL ASSESSMENTS AND THEIR PLACE IN THE HIGHWAY PROGRAM

In Illinois as in many other States, in cities and in municipal communities, streets and other public improvements are largely financed through special assessments. In Illinois cities in 1930, special assessments collected for highway purposes totaled \$56,260,200. At least \$50,000,000 of special-assessment highway-improvement bonds were issued. Practically all the costs of paving streets in cities of 10,000 and over, and also in many places smaller than this, are met through special assessments.

The special assessment obligations, not being a part of the cities' financial affairs, are not treated as a part of urban debt, and hence, are not subject to the salutary effects of debt limitation statutes. This makes possible such situations as exist, for example, in Niles Center, an Illinois city of 5,007 persons, having a special assessment debt outstanding of \$10,208,900, or over \$2,000 for every man, woman, and child in the city. Or, as an extreme case, the village of Westchester, a subdivision in Cook County, with a population of 358 persons, has an assessed value of \$2,369,200 and special-assessment obligations outstanding of \$3,375,577, or nearly \$10,000 per capita. While this is exceptional, there are many Illinois cities which have special-assessment obligations outstanding of from 10 to 50 percent of their assessed valuation. For example, Lombard, in Du Page County, with an assessed valuation of \$4,812,900, had outstanding special assessment obligations of approximately \$2,750,000, or about \$450 per capita. Villa Park, in Du Page County, with a population of 6,220 and an assessed valuation of \$4,533,900, had outstanding special assessment obligations of about \$4,000,000.

So far as is possible, these expenditures and receipts and debts have been assembled in this study. The highway expenditures include all of the public payments in Illinois for roads and streets, including those financed through special assessments.

With the exception of the Illinois Central charter line system, railroads pay upon the property allocated by the tax commission to the community the same

taxes as are charged against other property in the community. This caused them to contribute in 1930 \$3,658,400 toward the local highway program.

Many Illinois cities charge wheel taxes, usually from \$3 to \$5 per vehicle, for the use of streets. Occasionally revenues are derived from franchises for the use of certain streets by utilities. Illinois urban communities derived \$7,174,500 from these sources within the year, of which \$5,565,000 was in the city of Chicago.

While motor vehicles in Illinois are subject to the personal-property tax, the lax administration of the law makes these taxes more of a theory than a fact. Probably more cars are omitted than are assessed, and those which are listed usually are valued at nominal amounts. No reasonably accurate figures as to this tax could be obtained without an unwarranted expenditure.

#### BONDED INDEBTEDNESS

All units of Government in Illinois may bond. At the end of 1930 the total outstanding funded debt of the State and its subdivisions was \$959,238,400, and of this amount \$424,722,300, or 44.3 percent, was incurred for streets and highways. The remainder was distributed as follows: 8.6 percent for education, 43.5 percent for the protection of persons and property, and 3.6 percent for Government. In addition to the funded debt mentioned above, there were temporary borrowings outstanding of the city of Chicago of \$259,013,000, which in all probability will be eventually funded.

The State indebtedness stood at \$200,462,000, or a little over one fifth of the total public funded indebtedness, and of this sum \$148,010,000, or 73.8 percent, was incurred for the financing of highways. This is a self-liquidating debt now in the process of retirement, certain specific motor-vehicle receipts being set aside for this purpose.

It may be explained that the purpose in creating a State highway system was to construct as rapidly as possible a 10,000-mile system of highly developed roads which would be planned to serve the transportation needs of the State and would be developed and maintained in an intelligent manner. The entire project was to be controlled by the State, and, with the exception of Federal-aid appropriations, financed by the State.

At the outset this system was financed through bond issues, the first issue being one of \$60,000,000 authorized in 1918, and a second of \$100,000,000 authorized in 1924. Of the total bond issues authorized of \$160,000,000, \$158,000,000 were sold. These bonds are now being retired. Forty-eight hundred miles of the State primary system were provided for by the first bond issue of \$60,000,000, and 5,000 miles additional by the \$100,000,000 program. The last of the bond-issue money, amounting to \$2,047,000, was expended in 1930.

The county indebtedness was comparatively small, consisting of \$49,990,000 for Cook County, and \$10,498,900 for all of the other counties in the State, only 20 of the 102 counties having any bonded indebtedness whatever. Of this county indebtedness, the major portion is for the highway program.

Municipalities had a total indebtedness of \$673,157,100, by far the greater portion of this being in the form of special assessment bonds.

Townships had an indebtedness of \$25,130,400 which, outside of school-district obligations, was practically

entirely for township roads and was distributed widely throughout the State.

The total bonds outstanding on December 31, 1930 (\$959,238,400) were 12.4 percent of the assessed valuation of the State, and the per capita indebtedness was \$125.71. The per capita cost of all debt service in 1930 was \$15.42.

#### DEBT SERVICE

Debt service consists of the interest and principal payments on indebtedness. In Illinois in 1930 the total debt-service payments were \$117,586,400, of which \$53,929,100, or 45.9 percent, were for highways; \$8,308,600, or 7.1 percent, for education; \$53,318,700, or 45.3 percent, for public benefit; and \$2,030,000, or 1.7 percent, for government.

With the exception of State payments, as a general rule about two thirds of the debt service consisted of interest payments and the balance, principal. Details are shown in table 18.

While per capita debt figures are given, in considering such figures caution should be observed. Wide variance in local conditions prevents a general average from having any great significance. It is possible that the debt presentation is not entirely complete. The major portion of the municipal indebtedness is in the form of special-assessment obligations, the records as to which are in extremely poor condition and difficult of access. The same condition is found with respect to the township obligations. Every reasonable effort has been used to obtain complete information as to indebtedness. It is believed that the percentage of the total which may have been omitted is extremely small.

#### GENERAL EXPENDITURES ANALYZED

The total of all public charges levied against persons and property in Illinois for collection in the year 1930 was \$582,407,100, or \$76.32 per capita. The total of all expenditures for the same year was \$551,249,500, of which amount \$166,298,900, or 30.1 percent, was expended for highways; \$167,599,300 or 30.4 percent, for education; \$188,307,900, or 34.2 percent, for public benefit and protection; and \$29,043,400, or 5.3 percent, for government.

These expenditures include \$40,864,300 in interest payments on funded indebtedness, as well as interest on the short-term borrowings of municipalities. The principal payments of \$76,722,100 are not included, as they represent repayments of funds charged as expenditures in previous years.

There can be no exact agreement between receipts and expenditures. In the first place the amounts shown as taxes are the amounts levied. Eventually, practically all of these sums undoubtedly will be collected. For any one particular calendar year, however, it is possible that comparatively large sums may remain

TABLE 18.—Payments for debt service in 1930

Unit of government	Principal	Interest	Total
State.....	\$4,413,000	\$8,401,300	\$12,814,300
Per capita.....	0.58	1.10	1.68
Cook County.....	56,099,800	24,764,800	80,864,600
Per capita.....	14.09	6.22	20.31
All other units.....	16,209,300	7,698,200	23,907,500
Per capita.....	4.44	2.11	6.55
Total.....	76,722,100	40,864,300	117,586,400
Per capita.....	10.06	5.36	15.42

delinquent. Furthermore, tax levies and expenditures can never agree because of a difference in the time element. Taxes are levied to meet anticipated expenditures and also to defray costs which have been incurred in the past and defrayed through revenues received from the sale of securities and other borrowings. Expenditures are made out of funds received from current taxes, from surpluses, from balances on hand, and from borrowings.

Where old indebtedness is being retired and comparatively few new obligations are incurred, taxes will normally exceed expenditures. Where current work is to a considerable extent financed through borrowings, then expenditures will exceed taxes.

Table 19 itemizes the actual expenditures by units of Government with a per capita distribution of expenditures for the four major governmental purposes.

The various governmental agencies of the State perform various functions of public service. The State assumes the support of the through State highway system. This item and public benefit are major items of State expenditures. The public benefits administered by the State are correctional and public health institutions for the treatment of persons from all parts of the State; relief of catastrophes, such as droughts, floods, and wars; and State regulatory and conservation bodies. The educational activities of the State

#### ILLINOIS EXPENDITURES IN 1930

The total expenditures for all purposes (exclusive of principal payments on bonds and loans) by all units of Government in Illinois in 1930 were \$551,249,500, of which \$166,298,900 was expended for highways and streets, \$167,599,300 for education, \$188,307,900 for public benefit, and \$29,043,400 for other governmental purposes.

Expenditures by the State were \$91,079,500; by the counties, \$56,310,600; by Chicago, \$245,989,600; by other incorporated places, \$120,479,200; by the townships, \$37,390,600.

Of the total expenditures, 19.4 percent was made in rural areas (townships); 5.9 percent in incorporated places having a population up to 2,500; 9.9 percent in places of 2,500 to 15,000 population; 10.8 percent in places of 15,000 to 75,000 population; 1.8 percent in places of 75,000 to 400,000 population; and 52.2 percent in Chicago.

TABLE 19.—Total expenditures in 1930 by the State, the counties, and the local units of government; and per capita expenditures by purpose

Expended by—	Amount	Per cent	Per capita				Total
			Highways and streets	Education	Public benefit	Government	
State.....	\$91,079,500	16.5	\$5.30	\$1.32	\$4.80	\$0.52	\$11.94
Counties.....	56,310,600	10.2	2.21	.02	3.79	1.36	7.38
Townships.....	37,390,600	6.8	6.65	19.29	1.03	.86	27.83
Places up to 2,500.....	23,404,300	4.2	7.13	17.89	8.99	1.93	35.94
Places 2,500 to 15,000.....	42,727,400	7.8	9.16	21.35	12.75	1.73	44.99
Places 15,000 to 75,000.....	46,701,000	8.5	8.02	20.56	11.42	1.75	41.75
Places 75,000 to 400,000.....	7,646,500	1.4	10.05	16.03	13.09	.90	40.07
Chicago.....	245,989,600	44.6	22.47	21.75	26.10	2.53	72.85
Total.....	551,249,500	100.0	21.79	21.96	24.68	3.81	72.24

TABLE 20.—Percentage relationships of expenditures by units of Government and by purpose

Expended by—	Percentages of expenditures of the units of Government for the purposes indicated					Percentages of the total expenditure for each purpose made by each unit of Government				
	Highways and streets	Education	Public benefit	Government	All purposes	Highways and streets	Education	Public benefit	Government	All purposes
State.....	44.4	11.1	40.2	4.3	100.0	24.3	6.0	19.5	13.6	16.5
Counties.....	29.9	.3	51.4	18.4	100.0	10.1	.1	15.4	35.7	10.2
Townships.....	23.9	69.3	3.7	3.1	100.0	5.4	15.5	.7	4.0	6.8
Places up to 2,500.....	19.8	49.8	25.0	5.4	100.0	2.8	7.0	3.1	4.3	4.2
Places 2,500 to 15,000.....	20.4	47.5	28.3	3.8	100.0	5.2	12.1	6.4	5.7	7.8
Places 15,000 to 75,000.....	19.2	49.2	27.4	4.2	100.0	5.4	13.7	6.8	6.7	8.5
Places 75,000 to 400,000.....	25.1	40.0	32.7	2.2	100.0	1.2	1.8	1.3	.6	1.4
Chicago.....	30.8	29.9	35.8	3.5	100.0	45.6	43.8	46.8	29.4	44.6
Total.....	30.1	30.4	34.2	5.3	100.0	100.0	100.0	100.0	100.0	100.0

are primarily the conduct of institutions of higher learning. Under the heading "Government" are included the primary executive and administrative charges of the various units.

A general distribution of expenditures under the four heads and by various units of government, expressed in percentages, is conveniently shown in table 20.

The distribution of expenditures according to the classes of local unit in which they were made is shown, in per capita form, in table 21.

TABLE 21.—Per capita expenditures by purpose and by classes of local unit in which the expenditures were made

Expended in—	Streets and highways	Education	Public benefit	Government	Total
Townships.....	<sup>1</sup> \$46.72	\$20.25	\$9.53	\$2.70	<sup>1</sup> \$79.20
Places up to 2,500.....	9.66	19.07	17.57	3.65	49.95
Places 2,500 to 15,000.....	10.43	22.48	21.13	3.58	57.62
Places 15,000 to 75,000.....	8.26	21.70	19.82	3.59	53.37
Places 75,000 to 400,000.....	10.06	17.47	21.78	2.79	52.10
Chicago.....	<sup>1</sup> 22.56	23.08	35.07	4.57	<sup>1</sup> 85.28
Total.....	21.79	21.96	24.68	3.81	72.24

<sup>1</sup> These figures differ slightly from corresponding values given in the report published by the State of Illinois. For explanation, see footnote 5.

#### TABLES SHOW RELATIONS BETWEEN VALUATION, TAXATION, EXPENDITURES, AND OTHER FACTORS

The study disclosed interesting relationships among the factors of taxation, expenditures, valuation, population, etc. The valuation, taxation, and expenditures per capita in 1930 are shown in table 22.

TABLE 22.—Per capita valuation, taxation, and expenditures in 1930, in the various classes of local unit and in the State as a whole

Unit of government	Valuation	Taxation	Expenditures	Ratio of per capita expenditures to per capita taxation
Townships.....	\$1,494	\$53.22	<sup>1</sup> \$79.20	<sup>1</sup> 1.48
Places up to 2,500.....	712	58.37	49.95	.86
Places 2,500 to 15,000.....	713	69.05	57.62	.83
Places 15,000 to 75,000.....	778	65.92	53.37	.81
Places 75,000 to 400,000.....	906	63.24	52.10	.82
Chicago.....	1,045	95.21	<sup>1</sup> 85.28	<sup>1</sup> .90
Entire State.....	1,012	76.32	72.24	.95

<sup>1</sup> These figures differ slightly from corresponding values given in the report published by the State of Illinois. For explanation, see footnote 5.

The ratio of per capita expenditures to per capita taxation is a rather accurate index of the flow of State (including Federal) and county aids to the less populous areas, except as affected by abnormal borrowings.

For instance, in the townships per capita expenditures exceeded per capita taxation by \$25.98, or about 33 percent. Expenditures in municipalities, on the other hand, were less than taxes and this difference would be even greater (particularly in Chicago) if borrowings were also considered as a source of revenue. Table 22 indicates in general this shift in funds.

Table 23 gives percentage relationships between population, motor-vehicle ownership, valuation, taxes payable, and expenditures made in the several classes of local unit in 1930.

TABLE 23.—Percentage distribution of population, motor-vehicle ownership, property valuation, taxes paid, and expenditures made in the several classes of local unit in 1930

Unit of government	Population	Motor-vehicle ownership	Valuation	Taxes paid	Expenditures made
	Percent	Percent	Percent	Percent	Percent
Townships.....	17.6	13.4	26.0	12.3	19.4
Places up to 2,500.....	8.5	16.8	6.0	6.5	5.9
Places 2,500 to 15,000.....	12.4	17.0	8.8	11.2	9.9
Places 15,000 to 75,000.....	14.7	18.4	11.3	12.7	10.8
Places 75,000 to 400,000.....	2.5	3.3	2.2	2.1	1.8
Chicago.....	44.3	31.1	45.7	55.2	52.2
Total.....	100.0	100.0	100.0	100.0	100.0

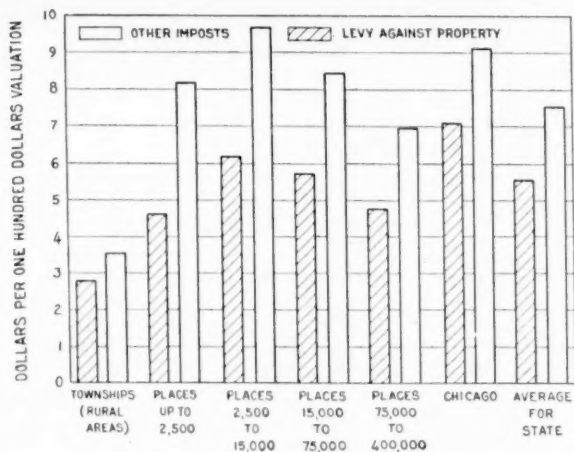
#### HIGHWAY EXPENDITURES DISCUSSED IN DETAIL

There was expended on all highways and streets in Illinois in 1930 a total of \$166,298,900, which exceeded the total taxes imposed for highways by \$16,032,200. The total expenditures were divided as follows: On the State highway system, \$40,421,100, or 24.3 percent; on the county systems, \$16,840,100, or 10.1 percent; on the local roads, \$8,937,500, or 5.4 percent. Street expenditures by municipal authorities were as follows: On Chicago streets, \$75,873,300, or 45.6 percent of the State total; and on other streets, \$24,226,900, or 14.6 percent.

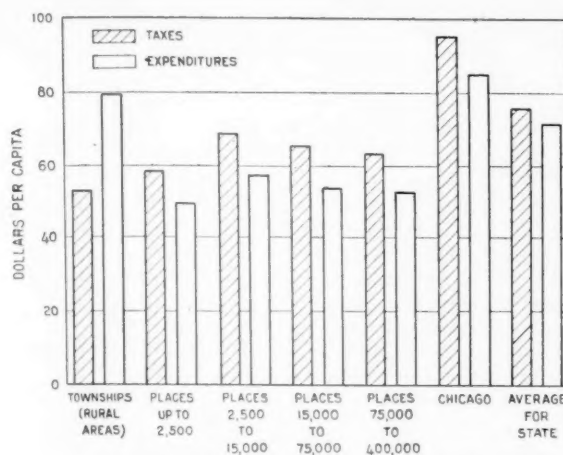
The sum of \$3,155,000 was spent by the Division of Highways on parts of the State trunk system lying within the limits of incorporated places; of this amount \$22,500 was spent in Chicago. In addition, Cook County expended \$265,400 on streets in Chicago which form a part of the county trunk system.<sup>5</sup>

Adding these amounts to the amounts expended by the municipalities themselves, we find that the total spent on urban streets was \$103,520,600; the total expenditures on rural roads being \$62,778,300.

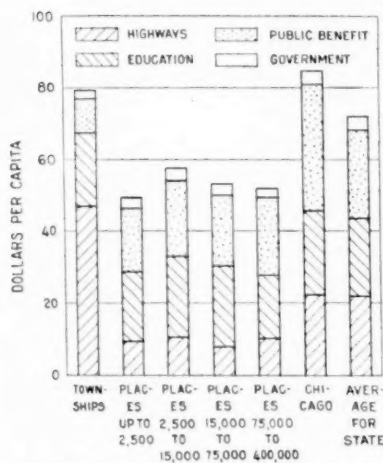
<sup>5</sup> At the time of preparation of the "Master statistical tables", which form a part of the full report published by the State of Illinois, the expenditures of Cook County in Chicago could not be ascertained. For this reason there are slight differences, negligible in effect, between figures given in tables 21, 22, and 23 and corresponding figures in the full report.



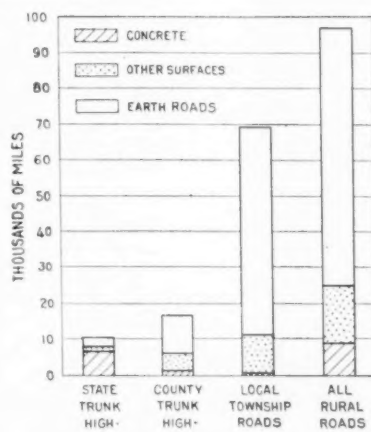
AVERAGE TAX RATES ON GENERAL PROPERTY IN THE SEVERAL CLASSES OF LOCAL UNIT AND THE STATE AS A WHOLE, AND RATES REQUIRED IF ALL TAXES WERE LEVIED ON GENERAL PROPERTY (TABLE 6)



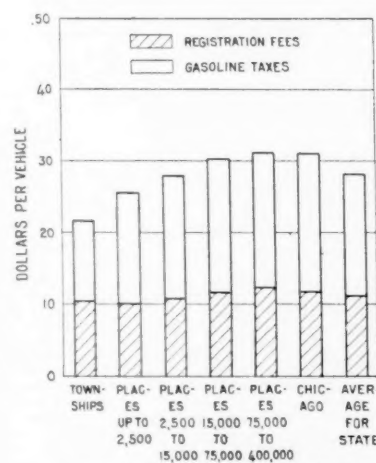
PER CAPITA TAXES AND PER CAPITA EXPENDITURES IN THE SEVERAL CLASSES OF LOCAL UNIT AND THE STATE AS A WHOLE (TABLE 22)



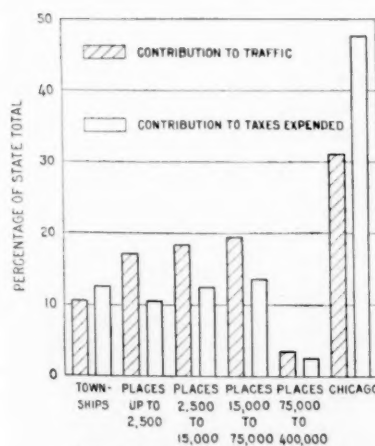
PER CAPITA EXPENDITURES BY PURPOSE IN THE SEVERAL CLASSES OF LOCAL UNIT AND THE STATE AS A WHOLE (TABLE 21)



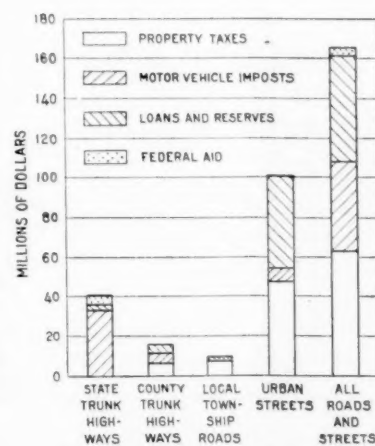
TOTAL MILEAGE OF RURAL HIGHWAY SYSTEMS AND SURFACED MILEAGE BY TYPES (TABLE 1)



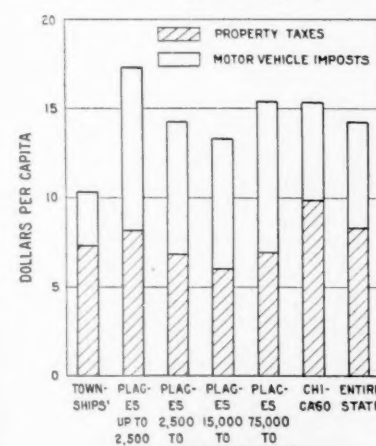
AVERAGE REGISTRATION FEES AND GASOLINE TAX PAYMENTS BY MOTOR VEHICLE OWNERS IN THE SEVERAL CLASSES OF LOCAL UNIT AND IN THE STATE AS A WHOLE (TABLE 15)



COMPARISON BETWEEN THE CONTRIBUTIONS BY MOTOR VEHICLES DOMICILED IN THE SEVERAL CLASSES OF LOCAL UNIT TO THE TOTAL TRAVEL OF ILLINOIS VEHICLES, AND THE CONTRIBUTIONS BY TAXPAYERS IN THESE SAME UNITS TO CURRENT TAXES EXPENDED ON ROADS AND STREETS (TABLES 14 AND 27)



TOTAL EXPENDITURES ON HIGHWAY SYSTEMS AND URBAN STREETS SHOWING SOURCES OF FUNDS (TABLE 27)



PER CAPITA CONTRIBUTIONS BY RESIDENTS OF THE SEVERAL CLASSES OF LOCAL UNIT TO CURRENT TAXES EXPENDED ON ROADS AND STREETS (BASED ON TABLE 27)

### GRAPHICAL SUMMARY OF ESSENTIAL FACTS DISCLOSED BY SURVEY OF ILLINOIS FINANCES IN 1930

All expenditures on the State highway systems were made under the supervision of the Division of Highways, and the total of these expenditures was \$40,421,100. A survey<sup>6</sup> conducted by the State of Illinois indicates that the total annual traffic is in the neighborhood of 3,419,000,000 vehicle-miles. The expenditures on the State system were, therefore, approximately 1.18 cents per vehicle-mile.

The total expenditures for construction and maintenance on the State system were \$31,954,300. The remaining expenditures, representing general undistributed overhead of the highway department and the interest on State highway bonds, totaled \$8,466,800. Table 24 gives the distribution of construction and maintenance expenditures among the subdivisions of the State system.

Table 25 gives the amounts expended for streets and highways in the several classes of local unit. Of the \$62,778,300 expended in the townships (i.e., on rural roads), \$37,266,100 was expended by the Division of Highways on the State system; \$16,574,700 by the counties on the county trunk system; and \$8,937,500 by the local authorities on the local (township) roads.

#### EXPENDITURES AND TAXES FOR STREETS AND HIGHWAYS COMPARED

Table 25 also gives, for purposes of comparison, the street and highway taxes paid (or payable) by taxpayers and motor-vehicle owners in the several classes of local unit. These figures were previously given in table 8. The last column of table 25 gives the ratio of expenditures to taxes.

There was spent upon the rural highway system, \$62,778,300. The rural units of government contributed in all forms of highway taxes, \$16,996,900. In other words, the highway expenditures in the townships were 369 percent of the revenues derived from these units of government. This shows a decided flow of revenues from the villages and cities toward the rural areas. The conclusion should not be hastily drawn that this represents an unfair subsidizing of the rural districts at the expense of the urban communities. It is well known that a large portion of the traveling

done by urban vehicles is in the rural areas, particularly on the State highways. Furthermore, the transportation facilities provided by good rural roads have decided influences upon urban commercial enterprises. The benefits received by the cities as a result of rural highway development tend to counterbalance the flow of revenues.

As a general rule, the less dense the population of the county, the greater its percentage of gain in the comparison of expenditures with taxation. While the townships in each county invariably received more in expenditures than they paid in taxes, the reverse was true for practically every group of incorporated places.

To avoid incorrect conclusions, such facts must also be carefully examined. For example, in the case of Chicago, it can be seen that the city paid \$70,913,600 in highway taxes and that the expenditures were \$76,161,200. It would seem, therefore, that the city of Chicago received more than it paid, but such is far from the case. During the year, Chicago incurred temporary and long-term indebtedness for highway purposes of \$41,491,000. Actually, Chicago contributed about \$18,995,400 to the State and county highway programs and there was expended by these agencies within the city the total amount of \$287,900.

It is also incorrect to assume that because Chicago contributed this \$18,995,400 to the State and county and received but \$287,900 in the form of expenditures, the difference necessarily will be spent in other communities. Various State and county highway funds are created from the highway receipts. It is easily possible that a community may in one year make a contribution to a fund and in the next year receive a benefit from that fund in the form of an expenditure. This is especially true of payments made

in the later months of the calendar year.

In considering revenues as compared with expenditures, it is also important to remember that there is a natural lag between the revenues and the expenditures.

#### SOURCES OF REVENUES FROM WHICH FUNDS WERE DERIVED FOR 1930 HIGHWAY EXPENDITURES

The first classification of the source of funds is by the governmental agency whose act made the funds available. These funds so classified are presented in table 26.

#### RELATIONS BETWEEN HIGHWAY TAXES PAID, HIGHWAY EXPENDITURES, AND TRAVEL

The total mileage of rural highways in Illinois in 1930 was 97,234. The State highway system consisted of 10,098 miles, divided into 6,976 miles of Federal-aid highways and 3,122 miles of other State trunk highways. The county highway system contained 17,369 miles, and the local township roads, 69,767 miles. No data are available on mileage of village and city streets.

The total volume of traffic (exclusive of out-of-State vehicles) on all roads and streets in Illinois during the year 1930 was approximately 14 billion vehicle-miles, of which 10.5 percent was produced by vehicles of rural ownership; 17.2 percent by vehicles owned in incorporated places having a population up to 2,500; 18.3 percent by vehicles owned in places of 2,500 to 15,000 population; 19.5 percent by vehicles owned in places of 15,000 to 75,000 population; 3.4 percent by vehicles owned in places of 75,000 to 400,000 population; and 31.1 percent by vehicles owned in Chicago.

Expenditures on the State highway system in 1930 were \$40,421,100; on the county systems, \$16,840,100; on the local (township) roads, \$8,937,500; on Chicago streets, \$75,873,300; and on other streets, \$24,226,900.

Of the total property taxes expended on all roads and streets, 10.9 percent was expended on county trunk highways; 13.8 percent on the local (township) roads; and 75.3 percent on urban streets.

Of the total motor vehicle taxes expended on all roads and streets, 72.8 percent was expended on State trunk highways; 11.5 percent on county trunk highways, and 15.7 percent on urban streets.

Of the total of all taxes and imposts expended on all roads and streets, rural property and motor vehicle owners paid 12.8 percent, and travel by rural vehicles made up 10.5 percent of the total travel on all roads and streets; city and village property and motor vehicle owners paid 87.2 percent, and travel by city and village vehicles made up 89.5 percent of the total travel.

<sup>6</sup> Report of the Survey of Traffic on Illinois State Highways, August 1931 to Labor Day, 1932, State of Illinois, 1932, p. 19.

TABLE 24.—Expenditures for construction and maintenance on the State highway system in 1930

Highway system	Construction expenditures		Maintenance expenditures		Total		Percentage of total construction and maintenance
	Amount	Per cent	Amount	Per cent	Amount	Per cent	
Federal-aid (primary)...	\$6,275,000	80.9	\$1,478,200	19.1	\$7,753,200	100.0	24.3
Federal-aid (secondary)...	12,913,300	91.1	1,261,400	8.9	14,174,700	100.0	44.3
Other State highways...	9,428,700	94.0	597,700	6.0	10,026,400	100.0	31.4
Total	28,617,000	89.6	3,337,300	10.4	31,954,300	100.0	100.0

TABLE 25.—Street and highway expenditures made in the several classes of local unit in 1930, and comparison of expenditures with charges imposed for streets and highways upon taxpayers and motor-vehicle owners in these classes of unit

Class of local unit	Street and highway expenditures		Street and highway taxes <sup>1</sup>	Ratio of expenditures to taxes
	Amount	Percent		
Townships.....	\$62,778,300	37.7	\$16,996,900	3.69
Places up to 2,500.....	6,294,400	3.8	15,059,300	.42
Places 2,500 to 15,000.....	9,907,200	6.0	21,479,300	.46
Places 15,000 to 75,000.....	9,237,300	5.5	22,114,800	.42
Places 75,000 to 400,000.....	1,920,500	1.2	3,702,800	.52
Chicago.....	76,161,200	45.8	70,913,600	1.07
Total	\$166,298,900	100.0	\$150,266,700	1.11

<sup>1</sup> See table 8.

TABLE 26.—Funds expended on the several highway systems and the urban streets in 1930, and the approximate amounts and percentages of these funds provided by imposts made by the various governmental units, and by loan and reserve funds

Highway system and form of revenue	Governmental agency providing funds				Total	Percentage of total current tax funds	Percentage of total funds
	Federal government	State	Counties	Local governments			
State trunk highways:							
Federal-aid system:							
Loans or reserves.....		\$2,047,000			\$2,047,000		
Current taxes.....	\$4,089,900	\$21,592,000			\$25,681,900	22.8	
Total.....	\$4,089,900	\$23,639,000			\$27,728,900		16.7
Percent.....	14.7	85.3			100.0		
State bond-issue system:							
Loans or reserves.....		\$1,097,400			\$1,097,400		
Current taxes.....		\$11,594,800			\$11,594,800	10.3	
Total.....		\$12,692,200			\$12,692,200		7.6
Percent.....		100.0			100.0		
Entire State system:							
Loans or reserves.....		\$3,144,400			\$3,144,400		
Current taxes.....	\$4,089,900	\$33,186,800			\$37,276,700	33.1	
Total.....	\$4,089,900	\$36,331,200			\$40,421,100		24.3
Percent.....	10.1	89.9			100.0		
County highways (State-aid):							
Loans or reserves.....		\$1,267,900	\$3,451,900		\$4,719,800		
Current taxes.....		\$5,256,500	\$6,863,800		\$12,120,300	10.8	
Total.....		\$6,524,400	\$10,315,700		\$16,840,100		10.1
Percent.....		38.7	61.3		100.0		
Local rural (township) roads:							
Loans or reserves.....				\$265,000	\$265,000		
Current taxes.....				\$8,672,500	\$8,672,500	7.7	
Total.....				\$8,937,500	\$8,937,500		5.4
Percent.....				100.0	100.0		
Urban streets outside Chicago: <sup>1</sup>							
Loans or reserves.....				\$6,369,500	\$6,369,500		
Current taxes.....				\$17,857,400	\$17,857,400	15.8	
Total.....				\$24,226,900	\$24,226,900		14.6
Percent.....				100.0	100.0		
Chicago streets: <sup>2</sup>							
Loans or reserves.....				\$39,104,500	\$39,104,500		
Current taxes.....				\$36,768,800	\$36,768,800	32.6	
Total.....				\$75,873,300	\$75,873,300		45.6
Percent.....				100.0	100.0		
All roads and streets:							
Loans or reserves.....		\$4,412,300	\$3,451,900	\$45,739,000	\$53,603,200		
Current taxes.....	\$4,089,900	\$38,443,300	\$6,863,800	\$63,298,700	\$112,695,700	100.0	
Total.....	\$4,089,900	\$42,855,600	\$10,315,700	\$109,037,700	\$166,298,900		100.0
Percent.....	2.5	25.8	6.2	65.6	100.0		

<sup>1</sup> Does not include expenditures by Division of Highways on streets which are part of the State trunk system.<sup>2</sup> Does not include expenditures by Division of Highways and Cook County on streets which are parts of the State and county systems.

It will be seen from the table that of all the revenues, the Federal Government provided 2.5 percent and the State 25.8 percent. The State highway system, consisting of the Federal-aid highways and the State-bond-issue system, is supported jointly by funds provided by the United States and the State. The county highway system is a joint enterprise between the State and the counties, about two thirds of the funds being provided through the acts of county authorities. The funds for rural roads and the city streets, except for those included as part of the other highway systems, are all provided through acts of the local officials.

Of the total expenditures for highways and streets, \$4,089,900 was Federal-aid money, \$53,603,200 was derived from loans and reserves, and \$108,605,800 was spent out of current receipts from property taxation and motor-vehicle imposts. Table 27 gives the breakdown of this latter sum into payments by taxpayers and motor-vehicle owners in the several classes of local unit; and thus shows the contributions by each of these classes to the expenditures in 1930 on the several highway systems and the local streets. The Federal-aid money is naturally not subject to such an analysis; and the loans and reserves do not represent taxes paid in

TABLE 27.—Approximate amounts of the 1930 taxes and imposts expended on the current highway program, listed according to highway system, type of tax, and class of local unit in which the tax was paid

IMPOSTS ON GENERAL PROPERTY											
Paid by taxpayers in—	Highway system										
	State trunk		County trunk		Township local		Urban streets		All highways and streets		
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Percentage of total
Townships.....			\$3,051,700	30.9	\$6,831,700	69.1			\$9,883,400	100.0	15.7
Places up to 2,500.....			383,900	7.1	739,700	13.8	\$4,257,800	79.1	5,381,400	100.0	8.5
Places 2,500 to 15,000.....			710,700	11.0	833,000	12.9	4,922,000	76.1	6,465,700	100.0	10.3
Places 15,000 to 75,000.....			578,000	8.6	268,100	4.0	5,872,300	87.4	6,718,400	100.0	10.7
Places 75,000 to 400,000.....			132,200	10.0			1,195,800	90.0	1,328,000	100.0	2.1
Chicago.....			2,007,300	6.0			31,203,800	94.0	33,211,100	100.0	52.7
Total.....			6,863,800	10.9	8,672,500	13.8	47,451,700	75.3	62,988,000	100.0	100.0

IMPOSTS ON MOTOR VEHICLES											
Townships.....	\$3,571,200	88.4	\$467,800	11.6					\$4,039,000	100.0	8.9
Places up to 2,500.....	5,071,400	85.2	814,700	13.7			\$68,700	1.1	5,954,800	100.0	13.1
Places 2,500 to 15,000.....	5,565,900	78.5	898,900	12.7			621,400	8.8	7,086,200	100.0	15.5
Places 15,000 to 75,000.....	6,468,200	78.7	1,030,300	12.5			726,800	8.8	8,225,300	100.0	18.0
Places 75,000 to 400,000.....	1,228,000	76.0	194,500	12.1			192,600	11.9	1,615,100	100.0	3.5
Chicago.....	11,282,100	60.3	1,850,300	9.9			5,565,000	29.8	18,697,400	100.0	41.0
Total.....	33,186,800	72.8	5,256,500	11.5			7,174,500	15.7	45,617,800	100.0	100.0

ALL IMPOSTS											
Townships.....	\$3,571,200	25.6	\$3,519,500	25.3	\$6,831,700	49.1			\$13,922,400	100.0	12.8
Places up to 2,500.....	5,071,400	44.7	1,198,600	10.6	739,700	6.5	\$4,326,500	38.2	11,336,200	100.0	10.4
Places 2,500 to 15,000.....	5,565,900	41.1	1,609,600	11.9	833,000	6.1	5,543,400	40.9	13,551,900	100.0	12.5
Places 15,000 to 75,000.....	6,468,200	43.3	1,608,300	10.8	268,100	1.8	6,599,100	44.1	14,943,700	100.0	13.8
Places 75,000 to 400,000.....	1,228,000	41.7	326,700	11.1			1,388,400	47.2	2,943,100	100.0	2.7
Chicago.....	11,282,100	21.8	3,857,600	7.4			36,768,800	70.8	51,908,500	100.0	47.8
Total.....	33,186,800	30.5	12,120,300	11.2	8,672,500	8.0	54,626,200	50.3	108,605,800	100.0	100.0
Federal aid.....	4,089,900								4,089,900		
Loans and reserves.....	3,144,400	5.9	2,479,800	8.8	265,000	.5	245,474,000	84.8	53,603,200	100.0	
Grand total.....	40,421,100	24.3	16,840,100	10.1	8,937,500	5.4	100,100,200	60.2	166,298,900	100.0	

<sup>1</sup> Of this sum, \$2,047,000 represents a balance from the highway bond issues. This amount will be repaid entirely through motor-vehicle imposts.

<sup>2</sup> This amount represents unexpended balances from reserve funds and bond issues and also new borrowings. If the present policies are continued in the future, at least half of this amount will be retired from the counties' share of State motor-vehicle revenues and the balance from local property taxes.

<sup>3</sup> These funds come primarily from new borrowings largely in the form of special assessments which will in all probability be retired through property imposts.

1930. However, information is given in the footnotes of table 27 regarding the provisions for retirement of the loans.

The data given in this table should not be confused with the information regarding street and highway tax levies given in the earlier part of this report, and in the report published by the State of Illinois. Tables 7 and 8, for example, give the total amounts levied for street and highway purposes in 1930. The funds so derived were expended in paying 1930 highway costs, in the retirement of indebtedness, and in the establishment of reserves for future work. Table 27 is concerned only with the amount spent on the current program in 1930. Thus it is shown in table 8 that the townships contributed 11.3 percent of the total street and highway levies in 1930; while table 27 shows that the townships contributed 12.8 percent of the current taxes expended in 1930 on streets and highways.

Property taxes expended for street and highway purposes approximated \$63,000,000; 75 percent of this amount was spent on urban streets. Motor-vehicle taxes were expended to the amount of more than \$45,000,000, of which approximately 73 percent was spent on State highways. Expenditures from loans and reserves exceeded \$53,000,000, with approximately 85 percent of this sum devoted to city and village streets.

It should be noted that the imposts on general property set forth in table 27 include special assessments

levied for highway and street construction, almost all of such assessments being in incorporated areas.

#### STUDY OF SURVEY DATA SHOWS RELATIONSHIPS BETWEEN TAXES, TRAVEL, AND EXPENDITURES

The information given in table 27, when studied with reference to other data given in this report, makes it possible to arrive at definite conclusions regarding the relations existing in Illinois in 1930, between the following factors:

1. Taxes paid for highways by taxpayers in the several classes of local government unit;
2. The funds expended on the several highways systems and the local streets;
3. The relative contributions by motor-vehicle owners in the several classes of local unit to the total travel of Illinois vehicles in the State.

#### CONCLUSIONS

1. No funds raised from taxes on property are expended on State highways.
2. Rural property pays no tax for urban streets.
3. Of the total tax on rural property expended for highway purposes:
  - (a) 30.9 percent was expended on county trunk highways;
  - (b) 69.1 percent was expended on local township roads.

TABLE 28.—Comparison of taxation and expenditures in Illinois in 1930

\$1,000 in taxes			\$1,000 in expenditures				
Residents of—	Pay—	In—	Division by purpose	Subdivision by highway system	Source of expenditures	Amount	Percent
Townships.....	\$96.86	General property taxes, \$733.71.	Education, \$304.03.	State highways, \$73.33	Taxes paid in—		
Places up to 2,500.....	36.51				Townships.....	\$6.48	8.83
Places 2,500 to 15,000.....	72.03				Incorporated places.....	53.73	73.27
Places 15,000 to 75,000.....	85.33				Federal aid.....	7.42	10.12
Places 75,000 to 400,000.....	14.06				Loans and reserves.....	5.70	7.78
Chicago.....	428.92						
Townships.....	8.29	Motor vehicle taxes, \$92.97.	Highways, \$301.68.....	County trunk highways, \$30.55.	Taxes paid in—		
Places up to 2,500.....	12.46				Townships.....	6.39	20.90
Places 2,500 to 15,000.....	14.67				Incorporated places.....	15.60	51.07
Places 15,000 to 75,000.....	17.00				Loans and reserves.....	8.56	28.03
Places 75,000 to 400,000.....	3.28				Taxes paid in—		
Chicago.....	37.27		Public benefit, \$341.60.	Township roads, \$16.21	Townships.....	12.39	76.44
					Incorporated places.....	3.34	20.60
					Loans and reserves.....	.48	2.96
Townships.....	17.65	Miscellaneous taxes, \$173.32.	Government, \$52.69.	Urban streets, \$181.59.	Taxes paid in—		
Places up to 2,500.....	16.30				Townships.....		
Places 2,500 to 15,000.....	25.90				Incorporated places.....	99.10	54.57
Places 15,000 to 75,000.....	24.29				Loans and reserves.....	82.49	45.43
Places 75,000 to 400,000.....	3.38						
Chicago.....	85.80						

4. Of the total tax on urban property expended for street and highway purposes:

- 7.2 percent was expended on county trunk highways;
- 3.5 percent was expended on local township roads;
- 89.3 percent was expended on urban streets.

5. Since, of the total assessed property valuation of approximately \$7,719,000,000, 26 percent, or approximately \$2,007,000,000 was rural, and 74 percent, or \$5,712,000,000, was urban:

- Expenditures from property taxes for all highways and streets were at the following rates per \$100 of assessed valuation:  
Rural—49.2 cents;  
Urban—93.0 cents.
- Expenditures from property taxes for county trunk highways were at the following rates:  
Rural—15.2 cents per \$100;  
Urban—6.7 cents per \$100.
- Expenditures from property taxes for local township roads were at the following rates:  
Rural—34 cents per \$100;  
Urban—3.2 cents per \$100.
- Expenditures from property taxes for urban streets were at the following rates:  
Rural—No tax;  
Urban—83.1 cents per \$100.

6. Of the total property taxes expended on all roads:

- 10.9 percent was expended on county trunk highways;
- 13.8 percent was expended on local township roads;
- 75.3 percent was expended on urban streets.

7. Of the total motor vehicle imposts expended on all classes of roads and streets:

- Rural motor vehicle owners (residents of townships) paid 8.9 percent, and travel by these same rural owners made up 10.5 percent of the total travel on all classes of roads and streets;

- Urban motor vehicle owners paid 91.1 percent, and made up 89.5 percent of the total travel.

8. Of the total motor vehicle imposts expended on all classes of roads and streets:

- 72.8 percent was expended on State trunk highways, including portions within urban areas;
- 11.5 percent was expended on county trunk highways;
- 15.7 percent was expended on urban streets.

9. Of all imposts and taxes expended on all roads and streets:

- 30.5 percent was expended on State trunk highways;
- 11.2 percent was expended on county trunk highways;
- 8.0 percent was expended on local township roads;
- 50.3 percent was expended on urban streets.

10. Of all imposts and taxes expended on all roads and streets:

- Rural property and motor-vehicle owners paid 12.8 percent, and travel by rural vehicles made up 10.5 percent of the total travel on all classes of roads and streets;
- City and village property and motor-vehicle owners paid 87.2 percent, and travel by urban vehicles made up 89.5 percent of the total travel.

#### FINAL COMPARISON OF TAXES AND EXPENDITURES

As a means of summarizing the general taxations and expenditures in Illinois in 1930, table 28 has been

(Continued on p. 56)

## STATE GASOLINE TAXES, 1932

[Compiled for calendar year from reports and records of State authorities]

State	Gross tax assessed prior to deduction of refund	Net tax earning on motor vehicle fuel	Other receipts, under tax law (licenses, etc.)	Grand total earning (tax and other receipts)	Disposition of grand total earning, according to law				Tax rate, 1932		Gasoline, or other fuel for motor vehicles, taxed	Percent change		
					Collection and administration cost <sup>2</sup>	Construction and maintenance on rural roads <sup>3</sup>		State and county road bond payments <sup>4</sup>	On city streets	Other than highway purposes			Cents per gallon	
						State highways <sup>3</sup>	Local roads <sup>3</sup>						Jan. 1	Dec. 31
Alabama	\$7,000,502	\$7,000,502	\$586	\$7,001,088	\$17,801	\$2,465,037	\$3,639,028	\$1,479,222			Nov. 5	136,421,624	-16.1	
Arizona	3,479,597	2,900,221	699	2,900,920	(6)	1,802,298	1,098,622					58,004,441	-10.4	
Arkansas	5,709,727	5,164,976		5,164,976	166,663	6,000,488	1,008,228	73,348,967				86,082,940	-22.2	
California	40,124,804	36,128,854		36,128,854	18,381	24,600,724	12,026,782			9,831,967		1,204,265,149	-9.4	
Colorado	6,134,473	5,409,220		5,409,220	60,923	3,783,808	1,460,240			10,162,249		136,730,489	-12.6	
Connecticut	4,087,912	4,684,588		4,732,512	(1)	4,732,512						234,220,379	-0.9	
Delaware	1,145,986	1,090,150		1,090,150	(1)	22,900						36,338,331	-11.7	
Florida	11,938,869	11,938,869		11,938,869	14,331,707	6,258,047						207,208,239	-11.8	
Georgia	2,539,950	2,277,727		2,277,727	11,938,869	7,456,406						198,900,154	-12.3	
Idaho	29,988,421	16,730,631		16,730,631	28,789,615	1,938,510						45,534,550	-7.2	
Illinois	17,938,367	17,938,367		17,938,367	182,098	19,047,969	9,523,084					938,408,536	-17.9	
Indiana	10,063,343	7,230,165		7,230,165	28,789,615	3,124,126						418,483,600	-7.2	
Iowa	8,202,889	8,202,889		8,202,889	157,520	12,406,540	3,498,780					249,040,598	-8.1	
Kansas	8,202,889	8,202,889		8,202,889	(19)	5,620,495	1,800,000					147,027,782	-6.9	
Kentucky	8,202,889	8,202,889		8,202,889	40,858	8,165,247						164,057,785	-11.7	
Louisiana	8,202,889	8,202,889		8,202,889	62,000	3,201,453						166,014,436	-4.0	
Maine	190,698	4,206,702		4,254,376	21,808	2,116,259						105,167,504	0.9	
Maryland	7,022,161	7,500,232		7,500,232	12,000	15,420,106						187,565,704	-1.4	
Massachusetts	16,805,808	16,310,328		16,310,328	16,510,278	5,930,136				1,482,526		550,642,607	-6.4	
Michigan	21,730,941	20,431,328		20,431,328	29,283	4,335,287						681,044,263	-9.7	
Minnesota	11,352,359	10,000,557		10,000,557	216,298	3,333,519						333,351,913	-16.4	
Mississippi	6,071,654	421,493		421,493	(7)	6,067,038	2,426,935					447,484,670	-2.8	
Missouri	9,183,169	8,940,693		8,940,693	37,650	9,301,846						53,803,120	-10.9	
Montana	3,421,504	2,660,156		2,660,156	31,601	5,845,849						195,236,623	-14.1	
Nebraska	7,863,113	83,648		7,803,465	15,000	7,27,117	1,948,616					18,177,920	-6.7	
Nevada	808,091	140,974		727,117	(13)	1,979,131						65,971,040	-0.7	
New Hampshire	2,710,386	2,638,841		2,638,841	29,360	1,979,131						553,914,175	-3.0	
New Jersey	4,346,263	16,017,425		16,017,425	32,610	1,007,724						43,845,055	-17.7	
New Mexico	2,362,264	2,192,253		2,192,253	36,500	9,415,420	5,947,745					1,485,127,929	-2.8	
New York	43,090,844	42,135,747		42,135,747	8,756	2,188,465	6,044,050					231,727,434	-7.2	
North Carolina	2,842,042	1,835,712		1,837,151	25,000	1,298,101	8,603,817					61,190,398	-12.9	
North Dakota	36,123,658	34,269,179		34,269,179	140,215	19,072,285	2,394,913					856,720,484	-4.3	
Ohio	9,061,097	9,061,097		9,061,097	81,609	7,184,739						241,527,434	-0.7	
Oklahoma	6,315,052	5,501,175		5,501,175	17,045	3,618,680						1,006,931,927	-2.0	
Oregon	30,280,915	30,280,915		30,280,915	497,800	21,882,999	5,095,308					92,701,256	-14.1	
Pennsylvania	2,020,740	1,854,025		1,857,711	(6)	8,555,965	776,385					103,748,781	-12.7	
Rhode Island	6,201,990	6,224,927		6,224,927	1,590,469	1,590,469						74,083,694	-15.8	
South Carolina	4,174,641	2,957,348		2,957,348	49,411,950	2,921,308						174,076,375	-11.3	
South Dakota	12,185,369	12,185,369		12,185,369	81,292	3,285,399						676,593,941	-11.3	
Tennessee	3,007,831	2,957,758		2,957,758	(19)	18,094,612						54,297,788	-4.7	
Texas	30,071,288	27,171,912		27,171,912	5,317	1,590,618						46,866,212	-10.0	
Utah	2,406	2,174,318		2,174,318	757	1,590,618						216,191,996	-5.6	
Vermont	1,874,648	10,809,640		10,809,640	(13)	7,506,720						220,630,195	-9.7	
Virginia	11,484,414	11,484,414		11,484,414	(13)	8,837,298						123,544,775	-8.3	
Washington	12,329,201	11,045,510		11,045,510	15,626	8,834,106						373,710,465	-13.4	
West Virginia	5,844,836	4,941,791		4,941,791	33,411,550	7,849,463						35,453,612	-10.6	
Wisconsin	16,346,941	11,948,145		11,948,145	33,411,550	951,639						101,774,858	-17.9	
Wyoming	1,418,145	2,035,497		2,035,497								14,250,173,296	-7.5	
District of Columbia	2,053,901				2,832,820	301,788,231	94,073,954	50,726,362	16,776,050	47,941,483	Weighted average rate, 3.90 cents			
Total		513,047,249		514,138,078										

- <sup>27</sup> Paid by State appropriation, \$11,082.
- <sup>28</sup> Includes \$117,817 receipts from special gasoline tax, levied in three counties for sea wall.
- <sup>29</sup> Includes \$15,000 allocated to gasoline inspection fund.
- <sup>30</sup> For sea-wall protecting road.
- <sup>31</sup> Referendum expenses and experimental equipment.
- <sup>32</sup> Paid by State tax commission, which collects the gasoline taxes.
- <sup>33</sup> Paid by motor vehicle department.
- <sup>34</sup> Includes taxes on 411,404 gallons used by motor boats and taxed 2 cents (rebate of 1 cent on 3-cent tax).
- <sup>35</sup> Includes \$60,000 for Department of Commerce and Navigation, and \$3,000,000 for unemployment relief.
- <sup>36</sup> Paid to refund reserve; collection cost of \$90,780 paid from State general fund.
- <sup>37</sup> Portion of appropriation from general funds estimated to have been derived from gasoline taxes.
- <sup>38</sup> Includes \$1,243,242 for State emergency fund for unemployment relief, \$1,486,986 for New York City general fund, and \$14,250,069 for State general fund.
- <sup>39</sup> Includes \$573,434 for county road bonds.
- <sup>40</sup> For State revenue department.
- <sup>41</sup> Gasoline tax law provides, allocated to State general fund.
- <sup>42</sup> Changed from 5-cent tax of previous year.
- <sup>43</sup> Pro rata of gasoline taxes for road service, balance being from motor vehicle receipts.
- <sup>44</sup> Includes approximately 2,344,022 gallons of "distillate" at 3½-cent tax.
- <sup>45</sup> Includes portion of State highway patrol expenses, and undistributable items.
- <sup>46</sup> Paid from motor vehicle fees, \$15,700.
- <sup>47</sup> Paid from State tax commission appropriation.
- <sup>48</sup> Includes \$3,532,646 for expenses of State auditor.
- <sup>49</sup> Includes \$8,841 for expenses of State auditor.
- <sup>50</sup> Includes \$1,726,153 for county road bonds.
- <sup>51</sup> For free school fund.
- <sup>52</sup> Payments reported from motor vehicle receipts, instead of pro rating a share from gasoline taxes.
- <sup>53</sup> Paid \$2,500 from motor vehicle department appropriation.
- <sup>54</sup> Paid from State appropriation, \$13,400.
- <sup>55</sup> Includes \$12,300 held in bad checks.
- <sup>56</sup> Allotted to county general fund in lieu of personal property tax on motor vehicles.

- <sup>1</sup> Not gasoline tax earned after deduction of refunds allowed by law.
- <sup>2</sup> Many States pay collection cost from other State funds, and such are noted. Administration cost includes balances allocated to reserve funds for administrative purposes.
- <sup>3</sup> Since this table covers the calendar year earnings, but not the actual collection period, during the year, these earnings are not comparable with similar columns in the financial tables, F-1 and F-4 issued by this Bureau, which covers annual periods fixed by State and local agencies; also certain funds are allocated to bond payments shown in column.
- <sup>4</sup> For State highway bond, except as noted.
- <sup>5</sup> Shows percent increase or decrease compared to net gallons reported in previous year.
- <sup>6</sup> Paid from State highway budget, \$16,860.
- <sup>7</sup> Includes \$1,024,069 payments on county road bonds.
- <sup>8</sup> Consists of \$17,393 for collection expenses in 1932.
- <sup>9</sup> For expenses of transportation tax division of board of equalization.
- <sup>10</sup> From motor vehicle department receipts, \$30,000.
- <sup>11</sup> Paid from State general fund.
- <sup>12</sup> Includes \$179,653 payment on county road bonds.
- <sup>13</sup> Payments on county road bonds.
- <sup>14</sup> Paid from State general fund.
- <sup>15</sup> To an equalization fund for public schools.
- <sup>16</sup> Payments on State highway treasury notes.
- <sup>17</sup> Aviation tax collected from aviation gasoline tax.
- <sup>18</sup> Paid from State general fund, \$15,000.
- <sup>19</sup> Consists of \$830,072 for State board of education, and \$830,072 for boards of commissioners of ports of New Orleans and Lake Charles Harbor.
- <sup>20</sup> Includes receipts from 1-cent tax on gasoline not used in motor vehicles.
- <sup>21</sup> To conservation department for oyster propagation.
- <sup>22</sup> Estimated.
- <sup>23</sup> For Metropolitan District Commission.
- <sup>24</sup> Includes \$107,430 special legal costs.
- <sup>25</sup> Includes \$3,615 from dealer's licenses allocated to State general fund, and \$25,668 from aviation gasoline tax allocated to aeronautic fund.

# MOTOR-VEHICLE REGISTRATIONS, 1932<sup>1</sup>

[Compiled for calendar or registration year from reports of State authorities]

[Compiled for calendar or registration year from reports of State authorities]																
State	1932 registered motor vehicles in- dividually and commercially owned <sup>1</sup>				Other registered vehicles		Tax-exempt official motor vehicles and motorcycles <sup>2</sup>		Number of licenses or permits		1931 grand total regis- tered motor cars and trucks	Year's change in motor-vehicle reg- istration; increase or decrease (-)			State	
	Grand total registered motor cars and trucks	Passenger auto- mobiles, taxies, and busses <sup>4</sup>	Motor trucks and tractors <sup>5</sup>	Trailers	Motor- cycles	United States cars	State and local cars	Motor- cycles (official)	Dealers	Operators and chauffeurs		Motor vehicles		Motor trucks, per- cent		
												Number	Per- cent			
Alabama.....	226,471	194,237	32,234	3,948	604	403	916	20	2,239	2,538	246,465	-19,994	-8.1	-8.6	Alabama.....	
Arizona.....	94,947	80,099	14,848	1,765	303	672	1,340	20	2,239	2,538	105,372	-10,625	-10.1	-13.8	Arizona.....	
Arkansas.....	136,503	112,587	23,916	3,118	188	297	436	1,034	275	12,214	180,731	-41,228	-24.5	-27.7	Arkansas.....	
California.....	1,971,616	1,735,854	235,762	61,870	8,338	2,502	17,531	(1)	3,025	3,451	2,043,281	-71,665	-3.5	-3.3	California.....	
Colorado.....	285,800	255,854	30,006	5,563	805	521	2,809	257	2,607	691,132	308,438	-22,598	-7.3	-7.4	Colorado.....	
Connecticut.....	343,007	280,660	53,347	1,384	2,090	733	2,864	93	3,025	345,311	339,428	-11,814	-3.3	-4.3	Connecticut.....	
Delaware.....	52,831	43,441	37,574	7,869	250	196	2,987	15	1,971	3,377	63,594	-2,351	-4.3	-3.9	Delaware.....	
Florida.....	286,091	245,666	42,650	4,021	291	203	1,186	15	3,282	70,788	323,200	-37,169	-11.5	-8.5	Florida.....	
Georgia.....	363,728	311,963	51,765	5,274	1,810	589	4,230	64	2,423	112,496	311,663	-33,124	-10.3	-10.8	Georgia.....	
Idaho.....	140,815	121,707	18,101	2,570	1,605	338	3,172	120	1,511	50,486	141,816	-16,338	-14.6	-14.8	Idaho.....	
Illinois.....	680,330	675,028	4,302	7,757	774	466	2,000	120	3,225	287,883	1,612,770	-119,272	-7.4	-7.9	Illinois.....	
Indiana.....	504,367	432,610	71,757	7,757	774	466	2,000	120	3,225	287,883	602,857	-65,877	-7.6	-6.5	Indiana.....	
Iowa.....	263,265	242,748	19,517	3,183	1,053	773	450	67	1,159	287,883	1,812,770	-16,338	-14.6	-14.8	Iowa.....	
Kansas.....	242,748	198,787	43,961	4,955	1,053	773	450	67	1,159	287,883	1,812,770	-16,338	-14.6	-14.8	Kansas.....	
Kentucky.....	171,757	156,774	14,983	3,183	1,053	773	450	67	1,159	287,883	1,812,770	-16,338	-14.6	-14.8	Kentucky.....	
Louisiana.....	321,242	286,583	34,659	4,955	1,053	773	450	67	1,159	287,883	1,812,770	-16,338	-14.6	-14.8	Louisiana.....	
Maine.....	801,909	774,437	27,472	2,570	1,605	338	3,172	120	1,511	50,486	559,176	-54,809	-9.1	-10.7	Maine.....	
Maryland.....	1,134,808	1,000,169	134,639	77,437	2,996	1,661	4,000	500	1,553	5,845	1,240,190	-20,302	-8.8	-8.5	Maryland.....	
Massachusetts.....	801,909	774,437	27,472	2,570	1,605	338	3,172	120	1,511	50,486	1,240,190	-20,302	-8.8	-8.5	Massachusetts.....	
Michigan.....	1,083,397	1,000,169	83,228	77,437	2,996	1,661	4,000	500	1,553	5,845	1,240,190	-20,302	-8.8	-8.5	Michigan.....	
Minnesota.....	149,060	121,807	27,253	2,570	1,605	338	3,172	120	1,511	50,486	1,240,190	-20,302	-8.8	-8.5	Minnesota.....	
Mississippi.....	717,466	618,447	109,019	10,008	1,545	862	1,979	21	2,237	42,000	840,190	-78,281	-5.1	-7.2	Mississippi.....	
Montana.....	109,129	88,347	20,782	13,531	834	116	555	5	2,237	42,000	1,240,190	-78,281	-5.1	-7.2	Montana.....	
Nebraska.....	375,716	335,035	40,681	6,646	89	231	397	503	2,716	9,429	1,240,190	-78,281	-5.1	-7.2	Nebraska.....	
Nevada.....	106,431	93,840	12,591	1,448	1,000	872	1,050	1	94	1,040,387	1,240,190	-78,281	-5.1	-7.2	Nevada.....	
New Hampshire.....	857,850	736,201	121,649	2,863	5,293	410	3,048	22,326	4,951	3,145,149	81,325	-12,017	-1.4	-1.4	New Hampshire.....	
New Jersey.....	76,707	61,720	15,047	13,796	11,503	3,048	8,929	75	3,842	16,723	2,297,249	-55,319	-2.4	-1.7	New Jersey.....	
New Mexico.....	2,241,363	1,931,384	310,546	7,774	1,440	181	12,622	389	3,220	22,129	4,298,737	-53,042	-12.3	-9.7	New Mexico.....	
New York.....	375,570	338,500	47,070	45,388	9	6,763	742	3,138	415	26,736	171,263	-17,723	-7.1	-6.5	New York.....	
North Carolina.....	1,538,324	1,420,550	117,774	13,796	11,503	3,048	8,929	75	3,842	16,723	1,710,263	-121,101	-11.3	-11.3	North Carolina.....	
North Dakota.....	259,302	226,405	32,897	215,043	7,865	9,744	1,816	910	1,375	9,559	482,725	-18,423	-6.8	-7.4	North Dakota.....	
Ohio.....	1,333,408	1,114,950	218,458	2,041	8,852	213	3,412	570	75	400	1,741,942	-18,423	-6.8	-7.4	Ohio.....	
Oregon.....	177,020	157,453	19,567	8,852	213	342	970	75	400	74,094	278,225	-18,423	-6.8	-7.4	Oregon.....	
Pennsylvania.....	161,933	142,552	19,384	31,464	3,294	1,89	1,848	163	476	24,228	1,741,942	-18,423	-6.8	-7.4	Pennsylvania.....	
Rhode Island.....	298,713	267,279	31,434	3,194	1,087	415	5,760	314	2,403	310	137,878	-203,719	-7,470	-3.2	-2.8	Rhode Island.....
South Carolina.....	1,191,324	1,001,675	189,649	18,762	879	434	428	153	310	94,329	203,719	-31,092	-16.1	-15.9	South Carolina.....	
South Dakota.....	98,851	83,089	15,762	18,365	519	138	435	138	310	94,329	193,025	-31,092	-16.1	-15.9	South Dakota.....	
Tennessee.....	77,595	69,230	8,365	61,781	1,673	2,031	1,306	607	177	11,588	350,337	-105,977	-8.2	-7.8	Tennessee.....	
Texas.....	370,387	308,806	61,581	4,543	1,776	1,220	2,632	329	1,708	59,462	1,240,190	-95,977	-8.3	-9.1	Texas.....	
Vermont.....	446,001	381,490	64,511	1,785	999	8	5,431	329	1,708	59,462	1,240,190	-95,977	-8.3	-9.1	Vermont.....	
Virginia.....	227,888	193,406	34,482	1,066	2,204	332	5,431	329	1,708	59,462	379,227	-6,282	-7.5	-8.2	Virginia.....	
Washington.....	694,652	587,330	107,322	9,896	(*)	116	2,712	689	92,634	9,730,649	430,878	-25,123	-6.0	-5.7	Washington.....	
West Virginia.....	56,226	46,330	9,896	17,677	607	1,854	2,712	689	92,634	9,730,649	253,308	-13,253	-10.0	-9.7	West Virginia.....	
Wisconsin.....	160,567	142,800	17,767	17,677	607	1,854	2,712	689	92,634	9,730,649	754,249	-59,597	-7.9	-9.8	Wisconsin.....	
Wyoming.....	24,136,879	20,965,422	3,233,457	412,998	91,296	936,475	143,666	9,008	2,634	9,730,649	62,101	-12,952	-9.5	-8.0	Wyoming.....	
District of Columbia.....											173,519	-12,952	-7.5	-7.5	District of Columbia.....	
Total.....	24,136,879	20,965,422	3,233,457	412,998	91,296	936,475	143,666	9,008	92,634	9,730,649	13,255,832,884	-1,696,005	-6.6	-6.5	Total.....	

<sup>1</sup> Not registered.

<sup>2</sup> Estimate based on 1931 data.

<sup>3</sup> Data covers registration year ending June 30, 1932.

<sup>4</sup> Includes 11,636 light delivery cars used for both passenger and light freight service.

<sup>5</sup> Excludes 11,636 light delivery cars used for both passenger and light freight service.

<sup>6</sup> Licenses reduced on motor cars and trucks, January 1, 1932.

<sup>7</sup> Includes 333 cars "at-large", not assignable to any State.

<sup>8</sup> Revised figure. Passenger cars revised to 302,594, and motor trucks revised to 32,227.

<sup>9</sup> Buses included with trucks.

<sup>10</sup> These official cars are exempted from paying regular registration fees and are excluded from "registered motor vehicles".

<sup>11</sup> Buses are included with passenger cars, except as noted in next column.

<sup>12</sup> No exemption of tax on official cars, which are included under registered cars.

<sup>13</sup> Revised figure. Passenger cars revised to 302,594, and motor trucks revised to 32,227.

<sup>14</sup> Buses included with trucks.

## PUBLIC ROADS

## MOTOR-VEHICLE RECEIPTS, 1932

[Compiled for calendar or registration year from reports of State authorities]

State	Registration receipts <sup>1</sup>				Miscellaneous receipts <sup>2</sup>				Disposition of gross receipts				State • State For other purposes
	Motor-car receipts		Other vehicles		Dealers' licenses	Chauff- eur and operator permits	Other miscel- laneous	Collec- tion and adminis- tration <sup>3</sup>	For highway purposes		State and county road bonds <sup>4</sup>		
	Total motor cars	Passenger cars and busses	Trucks and tractors	Trailers					State high- ways	Local roads			
Alabama <sup>1</sup>	\$3,038,206	\$297,457	\$264,907	\$24,228	\$1,046	\$1,088	\$13,056	\$107,287	\$131,649	\$1,010,284	\$531,686	\$1,364,587	Alabama <sup>2</sup>
Arizona	2,790,023	5,952,984	2,238,077	345,652	3,229	172,765	174,797	174,797	174,797	434,272			Arizona
Arkansas	9,391,366	1,309,907	383,100	7,546	36,955	615,241	615,241	615,241	615,241	2,963,048			Arkansas
California	7,953,950	6,215,370	1,497,997	17,307	20,426	1,240,403	403,323	403,323	403,323	6,921,817			California
Connecticut	1,016,396	896,211	622,079	8,846	1,073	12,432	32,965	32,965	32,965	456,026			Connecticut
Delaware	5,207,792	3,746,228	3,015,725	36,456	4,280	21,611	7,544	7,544	7,544	3,034,251			Delaware
Florida	3,825,792	3,106,269	4,083,053	1,777,246	6,073	12,432	32,965	32,965	32,965	456,026			Florida
Georgia	1,617,361	1,578,776	1,210,734	4,890	21,611	7,544	7,544	7,544	7,544	3,034,251			Georgia
Idaho	16,907,682	16,217,286	12,370,109	1,530	42,420	280,073	315,124	315,124	315,124	4,954,009			Idaho
Illinois	6,090,886	4,087,000	4,233,005	16,440	97,610	34,965	572,510	572,510	572,510	8,362,613			Illinois
Indiana	11,670,888	10,922,090	9,153,065	5,710	56,846	78,245	72,877	72,877	72,877	1,800,000			Indiana
Iowa	4,650,938	4,470,278	3,177,247	3,710	82,534	72,877	4,700,000	4,700,000	4,700,000	3,712,752			Iowa
Kansas	3,450,366	2,692,081	2,353,713	35,740	31,735	195,173	497,470	497,470	497,470	330,250			Kansas
Kentucky	6,567,646	3,812,358	2,575,088	2,219	10,350	2,020,270	678,984	678,984	678,984	1,704,910			Kentucky
Louisiana	19,835,711	18,137,510	14,091,487	4,372,472	11,332	518,983	646,154	646,154	646,154	405,169			Louisiana
Massachusetts	10,121,697	8,031,572	1,909,300	68,402	5,861	32,385	24,442	24,442	24,442	7,000,000			Massachusetts
Michigan	2,137,953	2,016,736	1,987,821	28,915	178	11,185	107,260	107,260	107,260	3,420,173			Michigan
Minnesota	9,824,564	1,987,821	2,008,915	11,185	178	11,185	107,260	107,260	107,260	1,796,552			Minnesota
Mississippi	1,244,174	1,247,022	666,539	250,483	784	16,113	29,315	29,315	29,315	4,919,027			Mississippi
Missouri	3,349,152	2,250,090	2,752,319	497,750	13,186	2,696	53,273	53,273	53,273	1,250,047			Missouri
Montana	2,304,440	3,885,808	2,852,646	163,162	3,607	2,696	29,315	29,315	29,315	2,272,407			Montana
Nebraska	15,413,228	11,567,111	7,573,516	734,487	4,786	24,789	67,884	67,884	67,884	1,846,960			Nebraska
Nevada	41,272,869	36,732,560	26,576,735	6,502	10,512	67,650	67,650	67,650	67,650	2,376,483			Nevada
New Hampshire	5,444,356	5,361,531	4,316,180	207,856	5,965	3,153,394	614,361	614,361	614,361	316,534			New Hampshire
New Jersey	1,796,326	1,786,486	1,432,986	514	4,409	296,754	2,966,618	2,966,618	2,966,618	910,760			New Jersey
New Mexico	18,424,972	17,493,326	5,882,366	416,479	23,393	64,400	300,987	300,987	300,987	281,363			New Mexico
New York	4,780,291	4,890,466	1,082,262	31,532	10,862	66,387	370,745	370,745	370,745	1,408,251			New York
North Carolina	29,815,715	22,313,417	15,401,709	6,911,708	20,325	25,690	545,317	545,317	545,317	1,019,629			North Carolina
North Dakota	2,183,509	2,707,181	3,328,180	439,000	1,721	13,140	374,849	374,849	374,849	1,408,251			North Dakota
Ohio	2,470,470	2,223,083	1,823,678	409,405	1,982	11,800	72,276	72,276	72,276	2,189,838			Ohio
Oklahoma <sup>1</sup>	2,444,290	2,386,475	1,939,046	447,429	1,982	11,800	103,622	103,622	103,622	2,305,458			Oklahoma <sup>2</sup>
Oregon	3,872,094	17,493,326	5,882,366	416,479	1,428	12,340	72,276	72,276	72,276	1,849,125			Oregon
Pennsylvania	6,548,171	5,942,758	4,890,466	1,082,262	31,532	10,862	66,387	66,387	66,387	3,180,432			Pennsylvania
Rhode Island	2,815,715	22,313,417	15,401,709	6,911,708	20,325	25,690	545,317	545,317	545,317	1,408,251			Rhode Island
South Carolina	2,183,509	2,707,181	3,328,180	439,000	1,721	13,140	374,849	374,849	374,849	1,408,251			South Carolina
South Dakota	2,470,470	2,223,083	1,823,678	409,405	1,982	11,800	72,276	72,276	72,276	1,849,125			South Dakota
Tennessee <sup>1</sup>	2,444,290	2,386,475	1,939,046	447,429	1,982	11,800	103,622	103,622	103,622	2,305,458			Tennessee <sup>2</sup>
Texas	3,872,094	17,493,326	5,882,366	416,479	1,428	12,340	72,276	72,276	72,276	1,849,125			Texas
Tennessee <sup>2</sup>	13,154,960	12,333,770	8,556,326	3,777,441	280,483	12,970	31,319	31,319	31,319	3,180,432			Tennessee <sup>3</sup>
Utah <sup>1</sup>	801,846	2,218,413	1,919,208	4,986,537	4,986,537	4,986,537	4,986,537	4,986,537	4,986,537	1,592,410			Utah
Vermont	6,240,867	5,809,032	4,802,649	1,006,383	15,306	7,528	57,864	57,864	57,864	8,402,797			Vermont
Virginia	2,170,547	2,001,055	1,109,680	831,375	52,602	4,738	10,082	10,082	10,082	1,890,684			Virginia
West Virginia	4,064,526	3,778,657	2,517,363	801,294	6,506	30,452	140,959	140,959	140,959	373,530			West Virginia
Wisconsin	10,281,303	10,041,978	7,512,586	2,529,392	70,060	11,620	124,447	124,447	124,447	3,557,500			Wisconsin
Wyoming <sup>1</sup>	676,442	142,920	21,401	607	2,899	221,133	475,437	475,437	475,437	166,000			Wyoming <sup>2</sup>
District of Columbia	898,086	167,321											District of Columbia
Detailed totals	292,875,448	259,601,319	( <sup>17</sup> )	( <sup>17</sup> )	2,844,973	294,523	17,279,116	11,409,285	17,550,422	75,964,336	39,339,980	35,506,810	Detailed totals
Grand totals	324,273,510												Grand totals

1 Financial data only on this table; for number of registrations, etc., see p. 54.

2 Complete details not reported except on county bond payments on county bond.

3 States for which no figures are shown make State appropriations for administration.

4 Payments on State highway bonds except as noted.

5 For details on county bond payments on county bond.

15 Includes \$2,996,223 payments on county bond.

16 Includes \$2,996,223 payments on county bond.

<sup>1</sup> Financial data only on this table; for number of registrations, etc., see p. 54.  
<sup>2</sup> Complete details not reported.  
<sup>3</sup> States for which no figures are shown make State appropriations for administration.  
<sup>4</sup> Includes payments on State highway bonds except as noted.  
<sup>5</sup> For State highway patrol.  
<sup>6</sup> Includes refunds of \$218,352.  
<sup>7</sup> Includes \$202,587, payments on county road bond interest.  
<sup>8</sup> Administrative expense of \$89,498 from State general fund.  
<sup>9</sup> For State general fund.  
<sup>10</sup> Includes \$375,399 for county general fund.  
<sup>11</sup> For Baltimore streets.  
<sup>12</sup> Includes \$312,028 for public safety department and \$45,000 for motor-vehicle-liability insurance expenses.

<sup>13</sup> Includes \$2,966,223 payments on county road bonds.  
<sup>14</sup> Includes \$38,000 for 1933 tags, advance payments.  
<sup>15</sup> Includes \$148,553 for administration from special State appropriation.  
<sup>16</sup> Excludes \$5,116,024 for unemployment relief, \$196,000 for free bridge commission.  
<sup>17</sup> Includes \$111,211 payments on county road bonds.  
<sup>18</sup> Includes State highway patrol, and prison-camp expenses for road work, \$124,587.  
<sup>19</sup> Includes \$1,563,707 payments on county road bonds.  
<sup>20</sup> Payment on county road bonds.  
<sup>21</sup> Includes \$105,000 for street signals.  
<sup>22</sup> Detailed receipts available for only 38 States and District of Columbia which total as follows: Passenger car and truck and tractor receipts, \$65,018,916.

(Continued from p. 51)

prepared. It shows a comparison between the sources of \$1,000 in taxes and the manner in which \$1,000 was expended, and is based on tables given previously in the report. The comparison, however, is not a direct one, for the \$1,000 unit cannot be identical for both taxes and expenditures. If it were desired to make the two sides of the tabulation balance exactly, as in the case of a true balance sheet, it would be necessary to include proceeds from bonds and loans on the left of the double line, and principal payments on the right, as well as to make due allowance for balances carried over and carried forward. The complete figures necessary for such a presentation are not available, so that expenditures as given cannot be said to balance receipts from taxes. It is believed, however, that table 28 gives a helpful picture of the relation between tax money received and actual expenditures in the year 1930.

### PRICE INDICES SHOW TREND OF HIGHWAY CONSTRUCTION COSTS

On the cover of PUBLIC ROADS this month there appears a chart showing the variation of price indices for highway-construction work from 1922 to the close of 1932. For the years from 1922 to 1930, inclusive,

the average price index for a given year is plotted directly under the symbol for that year. For 1931 and 1932 the average index for the fourth quarter is given under the symbol for the year.

An extended discussion of the derivation of these indices will appear in a subsequent issue of PUBLIC ROADS. It may be desirable, however, to remark here that the general index—designated “composite mile”—is an index in which the weightings assigned to the various items for which prices have been used in determining this index, are the amounts of these items which would have been used in building one mile of highway if that mile had contained an average amount of grading and an average footage of structures and had the surfacing been composed of gravel, macadam, concrete, etc., in amounts proportioned according to the average usage of these various surfaces. The base period used in determining both weightings and average base prices is the period 1925 to 1929, inclusive. The general index (composite mile) shows the trend in prices in the highway construction field taken as a whole.

In addition to the general index, three subsidiary indices are shown—excavation (grading), surfacing, and structures. These indices indicate the price changes which have taken place in the more restricted field which each covers.



## ROAD PUBLICATIONS of the BUREAU OF PUBLIC ROADS

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Any of the following publications may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. As his office is not connected with the department and as the department does not sell publications, please send no remittance to the United States Department of Agriculture.

### ANNUAL REPORTS

- Report of the Chief of the Bureau of Public Roads, 1924.  
5 cents.  
Report of the Chief of the Bureau of Public Roads, 1927.  
5 cents.  
Report of the Chief of the Bureau of Public Roads, 1928.  
5 cents.  
Report of the Chief of the Bureau of Public Roads, 1929.  
10 cents.  
Report of the Chief of the Bureau of Public Roads, 1931.  
10 cents.  
Report of the Chief of the Bureau of Public Roads, 1932.  
10 cents.

### DEPARTMENT BULLETINS

- No. 136D . . Highway Bonds. 20 cents.  
No. 347D . . Methods for the Determination of the Physical Properties of Road-Building Rock. 10 cents.  
No. 532D . . The Expansion and Contraction of Concrete and Concrete Roads. 10 cents.  
No. 583D . . Reports on Experimental Convict Road Camp, Fulton County, Ga. 25 cents.  
No. 660D . . Highway Cost Keeping. 10 cents.  
No. 1279D . . Rural Highway Mileage, Income, and Expenditures, 1921 and 1922. 15 cents.

### TECHNICAL BULLETINS

- No. 55T . . Highway Bridge Surveys. 20 cents.  
No. 265T . . Electrical Equipment on Movable Bridges.  
35 cents.

### MISCELLANEOUS CIRCULARS

- No. 62MC . . Standards Governing Plans, Specifications, Contract Forms, and Estimates for Federal-Aid Highway Projects. 5 cents.  
No. 93MC . . Direct Production Costs of Broken Stone. 25 cents.  
No. 109MC . . Federal Legislation and Regulations Relating to the Improvement of Federal-Aid Roads and National-Forest Roads and Trails, Flood Relief, and Miscellaneous Matters. 10 cents.

### MISCELLANEOUS PUBLICATION

- No. 76MP . . The results of Physical Tests of Road-Building Rock. 25 cents.

### REPRINT FROM PUBLIC ROADS

- Reports on Subgrade Soil Studies. 40 cents.

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Single copies of the following publications may be obtained from the Bureau of Public Roads upon request. They cannot be purchased from the Superintendent of Documents.

### SEPARATE REPRINT FROM THE YEARBOOK

- No. 1036Y . . Road Work on Farm Outlets Needs Skill and Right Equipment.

### TRANSPORTATION SURVEY REPORTS

- Report of a Survey of Transportation on the State Highway System of Ohio (1927).  
Report of a Survey of Transportation on the State Highways of Vermont (1927).  
Report of a Survey of Transportation on the State Highways of New Hampshire (1927).  
Report of a Plan of Highway Improvement in the Regional Area of Cleveland, Ohio (1928).  
Report of a Survey of Transportation on the State Highways of Pennsylvania (1928).  
Report of a survey of Traffic on the Federal-Aid Highway Systems of Eleven Western States (1930).

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A complete list of the publications of the Bureau of Public Roads, classified according to subject and including the more important articles in PUBLIC ROADS may be obtained upon request addressed to the U. S. Bureau of Public Roads, Willard Building, Washington, D.C.

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UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF PUBLIC ROADS  
CURRENT STATUS OF FEDERAL-AID ROAD CONSTRUCTION

AS OF

MARCH 31, 1933

STATE	COMPLETED MILEAGE	UNDER CONSTRUCTION			MILEAGE			APPROVED FOR CONSTRUCTION			BALANCE OF FEDERAL-AID FUNDS AVAILABLE FOR NEW PROJECTS	STATE
		Estimated total cost	Federal aid allotted	Percentage completed	Initial	Stage <sup>1</sup>	Total	Estimated total cost	Federal aid allotted	Initial		
Alabama	2,322.7	5,661,042.13	2,830,320.94	35	166.9	105.1	272.0	56,566.34	28,283.17	2.5	3,195,756.06	Alabama
Arizona	1,219.8	2,694,946.83	1,058,660.39	67	86.0	177.7	263.7	54,714.38	12,942.99	6.6	112,455.04	Arizona
Arkansas	1,937.4	4,313,469.76	2,039,695.13	45	115.2	62.2	177.4	1,590,275.37	75,081.32	139.9	830,315.04	Arkansas
California	2,485.0	6,762,746.88	2,858,772.40	73	182.7	37.0	189.7	1,324,559.45	126,877.45	45.2	114,372.99	California
Colorado	1,789.6	3,931,480.35	1,765,500.13	79	181.5	31.2	189.7	312,266.04	140,528.69	26.2	282,511.30	Colorado
Connecticut	2,894.8	4,684,457.13	1,425,799.33	63	51.0		51.0				97,238.46	Connecticut
Delaware	369.7	440,301.25	161,712.72	46	25.7	21.9	47.6	53,492.00	14,512.72	3.2	1,019,859.30	Delaware
Florida	681.0	6,146,330.35	2,977,084.22	67	169.8		169.8	484,404.35	29,202.17	3.1	32,400.89	Florida
Georgia	3,162.1	5,825,281.35	2,362,480.22	68	182.1	208.5	390.6	31,859.65	23,533.50	3.7		Georgia
Idaho	1,534.2	2,640,593.25	985,092.70	72	117.9	131.1	249.0	233,469.15	63,413.50	18.0	94,738.29	Idaho
Illinois	3,077.7	20,994,944.39	8,138,284.99	80	650.0	36.8	686.8	1,205,435.42	500,544.76	46.0	40,213.79	Illinois
Indiana	2,066.2	7,951,703.65	3,371,440.29	87	299.1		299.1	1,851,931.92	187,794.78	88.6	75,706.46	Indiana
Iowa	3,514.7	5,713,463.68	1,005,785.34	46	285.1	140.0	395.1	39,881.82	380.00	1.2	40,851.88	Iowa
Kansas	3,439.6	3,936,869.82	1,391,460.32	68	208.5	130.2	378.5	1,847,512.21	294,415.65	106.1	218,754.02	Kansas
Kentucky	1,869.0	4,616,147.88	1,647,083.91	53	189.4	138.7	328.1	5,128.59	2,194.00		151,859.31	Kentucky
Louisiana	1,602.8	7,337,649.87	3,211,145.73	59	95.0	26.2	81.2	38,958.62	3,989.09	1.9	1,947.11	Louisiana
Maine	818.9	2,387,703.90	584,500.29	76	70.5	3.3	73.8	354,798.40	28,745.00	10.6	189,774.59	Maine
Maryland	828.9	1,264,803.52	455,161.63	85	69.6	2.5	69.6				23,469.59	Maryland
Massachusetts	474.2	4,194,799.43	1,013,667.21	57	99.5	4.9	64.4				34,120.04	Massachusetts
Michigan	2,312.0	7,083,949.22	2,803,684.95	89	291.8	114.2	406.0	1,156,852.91	352,100.00	64.9	53,686.17	Michigan
Minnesota	4,312.5	4,645,947.47	1,333,628.91	85	149.6	139.5	289.1				59,532.87	Minnesota
Mississippi	1,814.7	6,514,594.06	3,414,116.39	57	281.1	84.2	365.3	551,221.45	275,610.69	16.9	3,052,467.48	Mississippi
Missouri	3,197.3	3,695,747.64	1,841,102.69	58	131.1	110.0	142.1	2,754,955.23	530,530.92	114.3	353,996.52	Missouri
Montana	2,817.1	6,366,112.12	3,681,344.53	58	488.6	204.6	751.2	4,744,552.01	265,748.90	31.8		Montana
Nebraska	4,284.8	6,450,011.04	2,992,718.69	46	171.6	192.8	371.4	131,104.51	42,294.58	8.4	5,449.41	Nebraska
Nevada	1,331.9	1,692,977.63	745,827.19	83	29.6	127.3	156.9	315,660.18	9,468.43	29.6	103,893.70	Nevada
New Hampshire	1,534.1	883,346.30	371,737.25	67	20.8	4.1	24.9	110,829.62	46,497.90	2.0	67,067.62	New Hampshire
New Jersey	534.5	6,084,565.26	2,073,149.45	68	61.0		61.0	331,475.91	181,605.15	17.3	96,352.96	New Jersey
New Mexico	2,357.3	3,562,926.63	1,585,685.66	61	176.8	96.6	273.4	1,371,477.65	489,690.00	27.3	114,900.01	New Mexico
New York	3,501.2	14,000,136.60	5,387,840.00	48	476.8	28.5	505.3					New York
North Carolina	2,259.2	4,592,771.29	2,295,740.69	50	90.5	23.6	59.1	1,217,931.47	615,722.23	131.0	1,126,713.32	North Carolina
North Dakota	5,295.0	4,253,860.48	1,654,786.78	49	339.7	395.2	734.9	1,003,899.33	315,658.72	64.7	402,041.34	North Dakota
Ohio	3,007.0	9,304,681.31	2,981,506.90	69	210.8	66.8	277.6	291,194.00	93,660.49	4.4	172,736.01	Ohio
Oklahoma	2,432.6	4,418,559.21	1,807,695.20	70	209.9	82.8	292.7	1,322,780.34	264,537.92	88.1	356,531.42	Oklahoma
Oregon	1,603.1	4,181,177.35	1,715,868.76	59	127.0	83.0	210.0	222,027.65	64,632.43	4.5	85,490.80	Oregon
Pennsylvania	3,190.5	11,899,519.78	3,429,360.23	53	419.4	14.0	433.4	428,754.95	161,792.80	15.2	40,772.28	Pennsylvania
Rhode Island	271.7	1,071,153.47	346,631.18	30	22.5	4.5	27.0	2,411.64	85.00		46,110.45	Rhode Island
South Carolina	1,557.4	3,522,878.38	1,350,142.33	65	162.8	194.7	357.5	274,261.06	62,171.28	33.7	45,503.14	South Carolina
South Dakota	4,386.0	3,711,465.82	1,504,575.32	72	291.4		291.4				172,341.89	South Dakota
Tennessee	1,642.2	3,319,486.51	2,559,198.48	37	169.8	64.1	233.9	239,240.16	119,620.07	7.8	516,790.79	Tennessee
Texas	1,816.9	19,234,233.26	7,820,307.34	66	759.8	522.0	1,281.8	3,048,676.92	690,793.71	261.4	153,359.07	Texas
Utah	1,242.3	1,921,545.76	768,287.53	66	100.5	89.2	189.7	268,094.92	80,923.21	26.5		Utah
Vermont	395.8	508,094.30	54,794.29	70	26.6		26.6	288,314.88	144,197.40	16.9	18,962.72	Vermont
Virginia	1,252.6	2,847,647.33	2,447,647.33	56	211.0	63.4	274.4	667,016.85	180,100.00	14.7	185,271.46	Virginia
Washington	1,252.6	2,587,331.18	815,612.10	51	102.3	2.8	105.1				58,593.33	Washington
West Virginia	925.5	3,035,185.19	1,235,826.15	64	113.6	8.2	121.8	116,441.06	47,441.06	2.2	37,496.95	West Virginia
Wisconsin	2,744.6	6,160,663.09	1,197,521.70	71	159.4	101.9	261.3	52,061.90	21,500.00	9.9	162,493.57	Wisconsin
Wyoming	2,076.6	3,202,480.00	1,149,934.91	64	264.2	163.3	427.5	274,423.60	27,103.37	14.5	40,260.03	Wyoming
Hawaii	78.4	1,539,870.63	1,539,870.63	44	68.0		68.0				508,575.87	Hawaii
TOTALS	105,646.1	265,678,268.23	96,310,952.69	62	9,627.7	4,227.6	13,855.3	25,734,700.49	7,467,695.25	1,407.9	14,949,452.46	TOTALS
		150,542,000.00	60,744,000.00									
		115,136,000.00	37,587,000.00									

<sup>1</sup>The term "percentage completed" refers to additional work done on projects previously improved with Federal aid. In general, with additional work estimate of the construction of a surface of higher type than was provided in the original improvement.